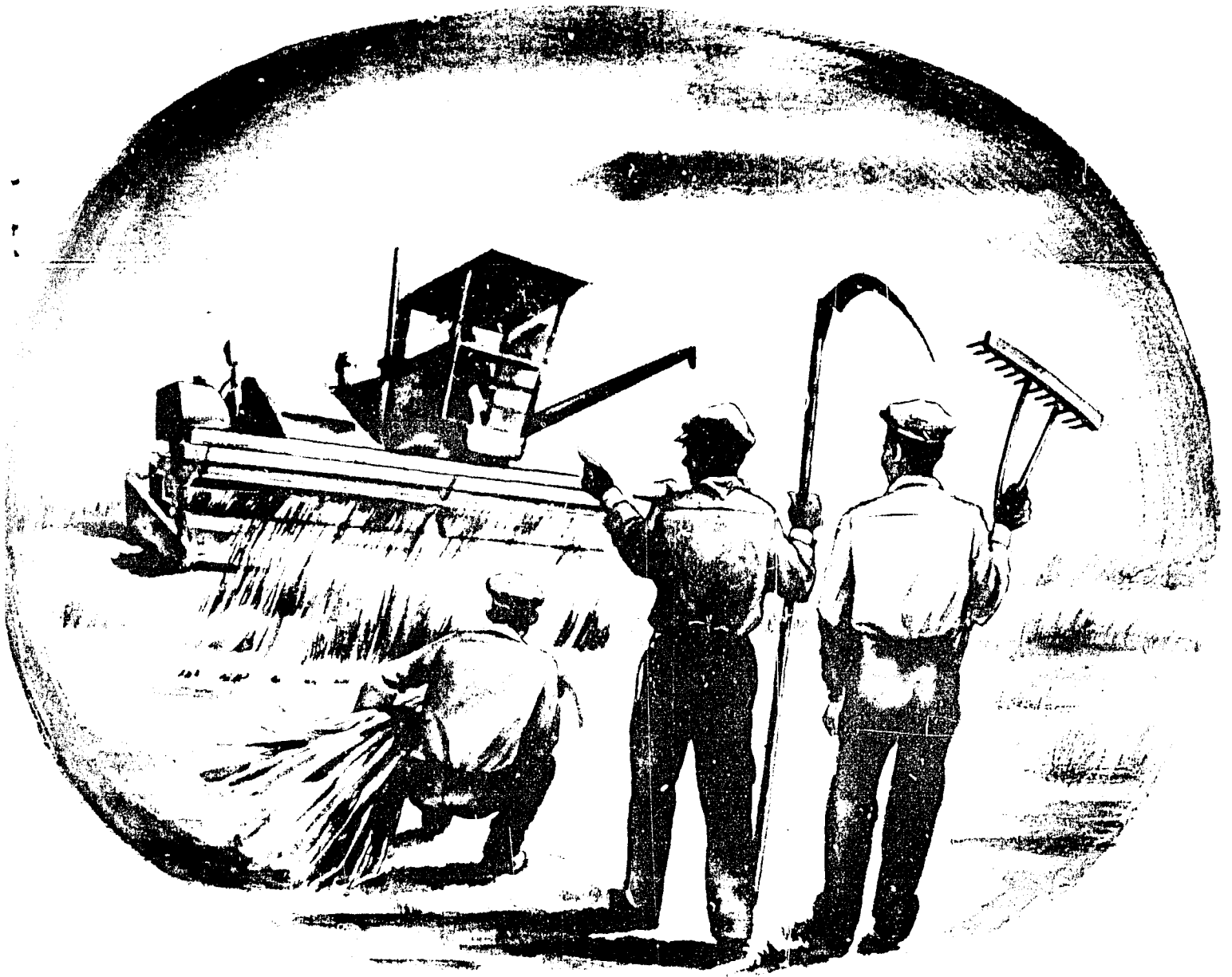




NEBRASKA in TURKEY

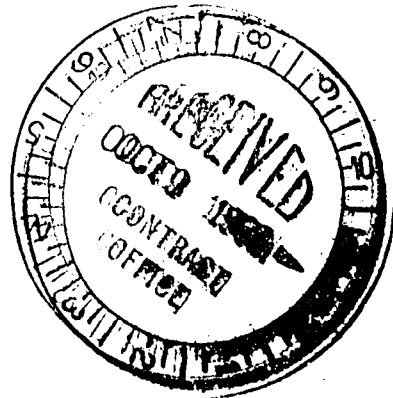
TURKISH UNIVERSITY PROGRAM

FINAL REPORT 1955-1968

COVER PAGE

The cover of this report was designed by Bart Stewart, Visual Aids Specialist for the Department of Information of the University of Nebraska. It depicts the cooperative effort of Ataturk University, the University of Nebraska and the Agency for International Development in establishing a modern university in Eastern Turkey that will contribute to the progress of Turkey. This illustrates the impact that Ataturk University will have on the economic development of eastern Turkey through improved agriculture.

* * * * *



UNIVERSITY OF NEBRASKA - AID CONTRACT PROGRAM

In accordance with provisions of Contract No. AID nesa-188
Appendix A - Article IV, we submit herewith the final report
covering the period March 28, 1955 to June 30, 1968

A. C. Breckenridge, Vice-Chancellor
International Programs

Jason S. Webster, Coordinator
Uni. Nebraska Turkish Program

E. F. Frolik, Dean
College of Agriculture and
Home Economics

Entered into Contract March 28, 1955

Amendments	May 3, 1955	July 3, 1956
	June 29, 1955	September 22, 1956
	August 5, 1955	January 5, 1957
	September 19, 1955	November 22, 1957
	March 16, 1956	

Superseded by New Contract May 19, 1958

Amendments	June, 1959	May, 1962
	September, 1959	August, 1963
	June, 1960	June, 1964

Superseded by New Contract July 1, 1965

Amendments	July 1, 1967
	July 1, 1968

SCOPE: Render technical advice and assistance to Turkey for the
purpose of improving the economic development and general
welfare of Turkey by assistance to its Ataturk University.

Conditions Governing Operations: Services provided in Turkey are an
integral part of the United States AID and will be performed under
the general policy guidance of the USAID Director; the University of
Nebraska will be responsible for all professional and technical
details of the contract and shall keep the USAID Director currently
informed of the progress of the project.

The July 1, 1968 Amendment provides for completion of the contract
operations in Turkey as of June 30, 1968 and for phasing out by the
University of Nebraska October 31, 1968.

THE UNIVERSITY OF NEBRASKA
OFFICE OF THE CHANCELLOR
LINCOLN, NEBRASKA

During the last 13 years the University of Nebraska has participated in the planning and development of Ataturk University. In 1955, as a result of a request from the Government of Turkey, the University of Nebraska agreed to assist the appropriate agencies in Turkey in the planning and development of a "land-grant" type university at Erzurum in eastern Turkey.

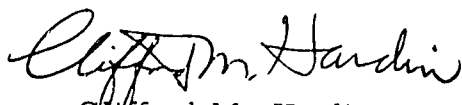
The primary objectives were to assist in the total planning, including campus site development and buildings, preparation of curricula, staff development, training of participants, and further development of agricultural experiment stations and extension services. Initially the University provided assistance to Ankara University in the fields of veterinary medicine and animal science. The primary effort during the past decade has been with Ataturk University.

With the formal establishment of Ataturk in 1967, Faculties in Agriculture and in Letters and Sciences were organized. Departments included agricultural economics, agricultural engineering, animal science, plant science, and soil science. Language departments were established in the Faculty of Science and Letters and later in the social sciences. While not a formal part of the University of Nebraska effort, a Faculty of Medicine was established in 1966 through arrangements between Ataturk and the Hacettepe Science Center.

During the 13-year period, 187 Turkish staff came to the United States for further education and training. These now form a strong nucleus of the faculties at both Ankara University and Ataturk University. Most of the participants involved are in agricultural areas. Approximately one third of the number received master's and doctor's degrees while in the United States. Most of the remainder were not degree candidates but came for post-degree work.

The University of Nebraska believes its mission was successful and will have a lasting impact upon higher education in Turkey. We believe also that it has contributed greatly to broadening the scope and interest of educational endeavor at the University of Nebraska.

Sincerely,

A handwritten signature in dark ink, appearing to read "Cliff M. Hardin". The signature is fluid and cursive, with the first name "Cliff" being more prominent.

Clifford M. Hardin
Chancellor

COORDINATOR'S COMMENTS

by

Jason S. Webster

Following World War I, Kemal Ataturk (the father of modern Turkey) instructed his country that it should "look to the Western World" for methods of developing the country. He emphasized the importance of education in a democracy and requested that a university be established in eastern Turkey to influence its cultural and economic development. His requests were partially activated by recent leaders in their request for the assistance of AID and the University of Nebraska to introduce the Land-Grant College philosophy in Ankara University and the new Ataturk University located at Erzurum, Turkey.

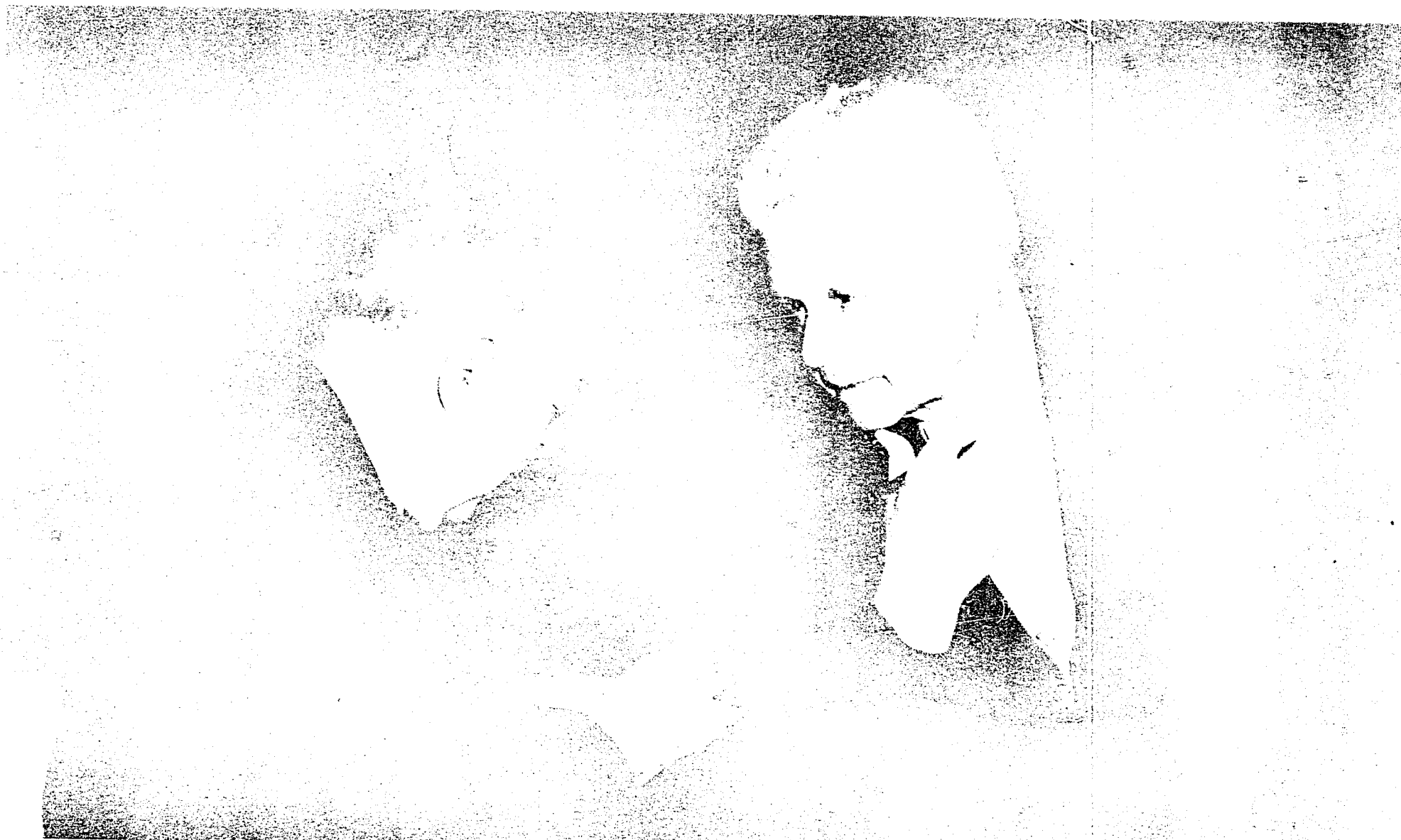
The University of Nebraska sent staff members to Ankara University in 1955 to advise the Turkish staff in teaching and research in Agriculture, Home Economics and Veterinary Science. Turkish staff members were also sent to the United States to obtain experience in our universities. This exchange of people continued until 1965. Modern laboratory equipment was also supplied to improve teaching and research methods at Ankara University.

During the time that assistance was being provided Ankara University, Ataturk University was being planned and developed at Erzurum, Turkey. The Government of Turkey purchased 1,600 acres near the city and constructed a modern campus including housing for the faculty members and students. The university was organized with a College of Agriculture and College of Science and Letters. A rotating staff of forty-seven University of Nebraska persons, each serving from two to nine years, assisted these two colleges from 1957 to 1968. In 1966 the Government of Turkey added a Medical College.

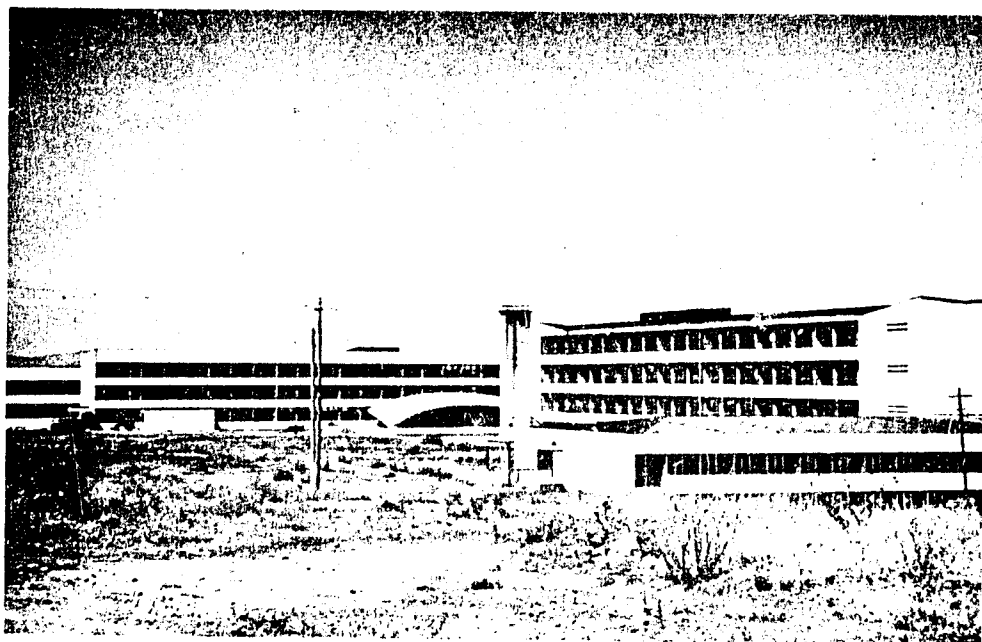
A Research Institute and an Extension Institute were established in 1966 for the purpose of improving the economic and cultural development of eastern Turkey. The Medical College has also extended its influence by establishing health centers in this part of Turkey.

The University of Nebraska together with other United States universities who admitted participants and who loaned staff members to the program, have benefited by broadening their knowledge and their appreciation of Turkey as a great ally. This influence has been transmitted from faculty members to United States students and other citizens with whom they have come in contact.

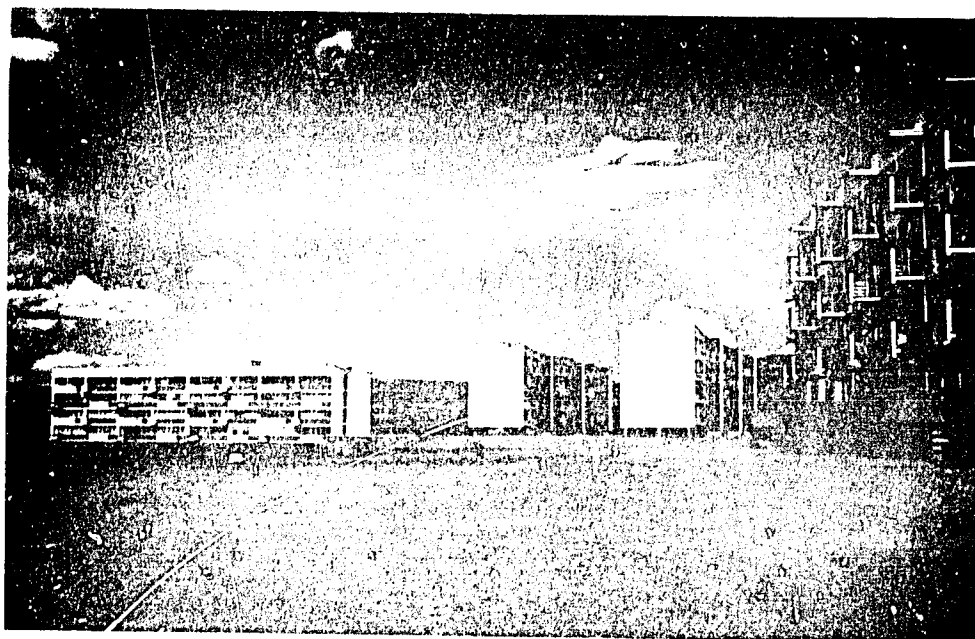
The United States could add to its understanding of the many cultures of the world if it would follow the suggestion of Ataturk and



Samuel Y. Young, Chairman, Federal Reserve Board, (left), and Dr. Martin L. Bower (right). Dr. Bower is Vice President of the Federal Reserve Bank of New York. He is also a member of the Board of Governors of the Federal Reserve System. (1955-1956) and is a member of the Board of Governors of the Federal Reserve System.



Ataturk University: Social Science Building (foreground)
Chemistry Building (background)



Housing units for staff members of Ataturk University



FORMER NEBRASKA STAFF IN TURKEY

NAME	ADDRESS
Alexander, M. A.	1433 No. 37 St., Lincoln, Nebraska 68503
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Fox, Robert L.	College of Agriculture, Uni. of Hawaii, Honolulu, Hawaii 96814
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Harper, Mrs. Horace J.	1523 North Main, Stillwater, Oklahoma 74074
Harrell, Bryant E.	Robert College, Bebek P. K. 8, Istanbul, Turkey

FORMER NEBRASKA STAFF IN TURKEY (Continued)

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Palmer, Edgar Z.	2415 Winthrop Road, Lincoln, Nebraska 68502
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Vennix, Arthur J.	RFD 2, Lincoln, Nebraska 68500
Vandervort, Gordon	
Weaver, H. Lloyd	2740 Royal Court, Lincoln, Nebraska 68502
Weigel, Paul	8110 Sagamore Rd., Leawood, Kansas 66206

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Wheeler, Mrs. Ernest J.	531 Ann St., East Lansing, Michigan 48823

FORMER NEBRASKA SECRETARIES IN TURKEY

Ames, Mercedes A.	4123 Randolph, Lincoln, Nebraska 68510
Bliven, Bonita	28 So. Elder Ave., North Platte, Nebraska 69101
Bures, Mrs. Carol	1317 No. 33 Street, Lincoln, Nebraska 68503
Crawford, Shirley	American Embassy, USAID Bogota, Columbia, S.A.
Crowe, Mrs. Vera	2636 No. 56 St., Lincoln, Nebraska 68507
Hughes, Regina (Mrs. Fred Clonninger)	3901 No. 11 St., Carter Lake, Omaha, Nebraska 68110
Lesoing, Doris	1545 D St., Lincoln, Nebraska 68502
Magorian, Mary Lou (Mrs. Ron Sherk)	8011 Reno Road, Lincoln, Nebraska 68505
McCullough, Sally (Mrs. Robert G. Miller)	2233 Park Avenue, Lincoln, Nebraska 68502
Neeman, Bonnie (Mrs. Carl Brenneman)	4640 Ramodell Ave., La Crescenta, California 91014
Nelson, Virginia Louise (Mrs. Geo. Bass, Jr.)	1493 Willis Mill Rd., S.W. Atlanta, Atlanta, Georgia 30311
Perrin, Mrs. Marie	3112 So. 31 St., Lincoln, Nebraska 68502
Souчек, Robert	deceased
Swanstrom, W. Wylene (Mrs. James Twombly)	143 Warren Avenue, Hawthorne, New York 10532
Wollen, Mary Jane (Mrs. Don R. Sapp)	318-4th Ave., Box 51, Copple, Pa. 16136
Woods, Beth (Mrs. Norman Howarth)	11218 Hogan Road, Gaines, Michigan 48436

UNIVERSITY OF NEBRASKA STAFF IN TURKEY
AT TERMINATION OF THE CONTRACT

NAME	POSITION	TENURE IN TURKEY
Bliven, Bonita	Secretary - Ankara	3 years, 4 months
Bresson, Amel L.	Prof. Chemistry	2 years, 9 months
Broz, James J., Jr.	Prof. English	1 year
Bures, Allen	Operations Clerk	1 year, 4 months
Bures, Carol Sue	Secretary	1 year, 2 months
Dunkelberg, George H.	Prof. Ag. Engineering	2 years, 5 months
Fenske, Leo J.	Prof. Ag. Management	7 years, 8 months
Loewenstein, Duane E.	Chief Advisor, Nebraska Group	1 year, 8 months
	Ag. Extension Technician	
Ross, James G.	Prof. Plant Science	2 years, 3 months
Vandervort, Gordon	Prof. Mathematics- Physics	1 year

ATATURK PARTICIPANTS IN THE UNITED STATES UNDER UNIVERSITY OF NEBRASKA
AID CONTRACT PROGRAM AS OF JUNE 30, 1968

NAME	FIELD OF INTEREST	LOCATION	ARRIVAL IN U.S.	TERMINATION
ALICI, Unal	Ag. Engineering	Uni. Nebraska	July 13, 1967	June 30, 1968*
APAN, Huseyin	Horticulture	Uni. Nebraska	July 13, 1967	June 30, 1968*
CAGLAR, Metin	Ag. Economics	Uni. Nebraska	July 13, 1967	June 30, 1968*
DAICI, Muhammet	Botany	Uni. Nebraska	July 13, 1967	June 30, 1968*
GUNEL, Erol	Plant Breeding	Uni. Nebraska	Sept. 5, 1966	Sept. 4, 1968
GUNEI, Gunes	English	Uni. Nebraska	Sept. 5, 1966	Sept. 4, 1968
HASIMOGLU, Sumer	Animal Science	Uni. Nebraska	July 13, 1967	June 30, 1968*
KOYCU, Coskun	Plant Science	Uni. Nebraska	Jan. 25, 1966	Aug. 31, 1968
KURU, Mustafa	Zoology	Uni. Nebraska	July 13, 1967	June 30, 1968*
OGUT, Cevdet	Ag. Economics	Uni. Nebraska	July 13, 1967	June 30, 1968*
OZBEK, Hikmet	Entomology	Uni. Nebraska	July 13, 1967	June 30, 1968*
OZGUDEK, Fatma	Linguistics	Georgetown Uni.	Sept. 5, 1966	Oct. 31, 1968**
PIRIMOGLU, Abdulgaki	Economics	Uni. Nebraska	Feb. 23, 1967	Oct. 31, 1968
TORAMAN, Ayhan	Economics	Uni. Nebraska	July 13, 1967	June 30, 1968*
TURKO, Metin	Business Org.	Uni. Nebraska	July 13, 1967	June 30, 1968*

* Transferred to direct AID sponsorship under the United States Department of Agriculture on June 30, 1968.

** To be transferred to direct AID sponsorship under the United States Department of Agriculture as of October 31, 1968.

FORMER ATATURK PARTICIPANTS NOW UNDER ASSISTANSHIPS
IN THE UNITED STATES AS OF
JUNE 30, 1968

NAME	FIELD OF INTEREST	LOCATION	ARRIVAL IN U.S.	TERMINATION
AKSOY, Ayhan	Animal Science	Uni. Nebraska	Jan. 27, 1964	June 30, 1968
ISYAR, Yuksel	Ag. Economics	Uni. California	Aug. 8, 1965	Aug. 7, 1969
KIP, Ergun	Ag. Economics	Uni. California	Sept. 6, 1963	June 30, 1968
YILDIZ, Attila	Chemistry	Uni. North Carolina	Sept.12, 1963	July 1, 1967

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T E R M I N A L R E P O R T

of the

UNIVERSITY OF NEBRASKA GROUP IN TURKEY

March 28, 1955 - June 30, 1968

INTRODUCTION

Ataturk University, located in Erzurum in the remote highlands of Eastern Turkey, is somewhat unique in origin and character for Turkey. It was established by charter legislation effective June 6, 1957. Support to Ataturk University was continuous from USAID (originally ICA) and the University of Nebraska from March, 1955 through June 30, 1968.

Ataturk University was intended to be a departure from the pattern of the older, well-established universities in Turkey. The original intent of the University of Nebraska was to render technical advice and assistance to Turkey for the purpose of (1) creating a new land-grant type university at Erzurum, Turkey, (2) training its faculties of Agriculture and supporting fields, (3) developing and strengthening Ankara University's program in Agriculture and Veterinary Medicine.

ROLE OF THE UNIVERSITY IN DEVELOPMENT OF EASTERN TURKEY

Ataturk University is in a strategic position to aid in solving regional problems. It serves a vast underdeveloped area of 18 Provinces which have long been isolated from the centers of higher learning.

Although capital investments are necessary at the infrastructural level and on individual farms, the development of human resources is also important. In fact, economic growth and development depend upon changes in human behavior. It is man, through his decisions, that brings about change. Education is the key to change.

Therefore, Ataturk University has an important role to play in the development of the East which includes nearly six million people in 9,500 villages and towns. The University was established to carry out this role through its residence instruction, research, and extension programs.

(1) Through instruction, the future rural leaders will be developed. Young men and women will be educated for the purpose of understanding with a desire of how to skillfully cope with the many and varied problems which have for years inhibited the economic and social development of the people in the area.

(2) Through research, the basic economic, social and cultural problems of the area can be identified and solved. No area of science can escape this duty--medicine, sociology, economics, the agricultural sciences of plants, animals and soils, engineering, chemistry, and many other branches are involved.

(3) Through extension, the findings of research can be disseminated to the people with encouragement for application. Unless this is done, much of the work stated above will be in vain.

Change is the rule in the world today. No area, however remote, will long remain isolated from the rest of society. The universities of today thus face the challenge of understanding and directing the changes that are inevitably forthcoming. Ataturk University is no exception.

The major objective of the work under this contract was "to assist the Government of Turkey in developing the administrative, staff, facilities and programs (college level, graduate, research and extension) of Ataturk University to support the economic, social and cultural development of Eastern Turkey".

For achievement of this objective, assistance was provided to the Agricultural Faculty, Science and Letters Faculty, and University administration through three main activities: Ataturk University staff members were trained at United States Universities, United States professors and supporting staff worked at Ataturk University, and a United States commodity acquisition program provided needed laboratory and classroom equipment to the new developing institution. Efforts channelled through these activities and related integral aspects will be reported as they relate to the components of the objective--administration, staff, facilities and programs for Ataturk University. (Assistance to Ankara University phased-out at an earlier date and this aspect of work will not be presented.) A resume within the framework of the major objective concerning administration, staff development, physical facilities and programs is presented which includes the progress and problems encountered and the major achievements resulting from contract input.

The task ahead for Ataturk University is pointed out if the University is to fulfill its potential role in Eastern Turkey.

ADMINISTRATION

Ataturk University remains largely under the direct control of the Ministry of Education for personnel and programming decisions. The University budget, although nearly adequate in most respects, is rigidly controlled by an on-campus representative of the Ministry of Finance.

When the Ataturk University Law (No. 6990) was passed in 1957, the University was bound to the General University Law (No. 4963). From the beginning, Ataturk University could not develop freely outside the existing framework of the older universities. Subsequent efforts to change the law were futile.

The present Rector, Professor Doctor Resit Sommez, on leave from Ege University for two years, is the twelfth person to occupy this position since the first one was appointed in November 1957. Nine men have served as Dean of Agriculture since March 1958. Eight persons have served as Dean of Letters and Science. The tenure of these positions and names of incumbents are provided in Table 1. According to the law establishing Ataturk University the appointments to Rector and Dean positions during the initial ten years were to be made by the Ministry of Education.

University Administration is headed by the Rector. At the next level is the General Secretary who is responsible for sections in charge of Personnel, Student Records, Accounting, Library Services, Equipment Inventories, Purchasing of Supplies and Equipment, Printing Operations and University Housing.

At the Faculty level the Dean is the administrator. The department chairmen, six in Agriculture and eight in Letters and Science, maintain their respective departments, assuming responsibility for staff development. The University Farm and Extension Institute Directors are responsible to the Rector. The former also receives guidance from a committee of Agricultural Faculty members with the Dean as chairman. As of June 30, 1968, the University Farm Director was also Acting General Secretary and the Extension Institute Director was serving as Head of Dairy Technology.

Both faculties have a Professor's Council where matters pertaining to programs and personnel are openly discussed and recommendations or decisions are reached. The Rector's Office is formally notified and performs the necessary follow-up procedures. The laws and regulations which govern most universities in Turkey are frequently quoted and rigidly adhered to by the councils.

A University senate is not in existence. The required number of qualified staff members from the different faculties are not yet available. When the senate is developed, greater autonomy will become available to the University. Without Ministry of Education approval, the staff members can then elect their own Rector, Deans and Department Chairmen from their own members. The faculty, to a great extent under these circumstances, can become immune to many outside pressures. Their greatest influence would be from the faculty members and students, and to a lesser extent the Ministries and certain segments of the public.

The University of Nebraska group members serving at Ataturk University were accorded full academic standing within their respective departments. This team of United States Professors and back-up staff was headed by a Chief Advisor who fulfilled the administrative role for the group and worked directly with Ataturk University Administrators. Through AID/Ankara, the Nebraska Group was supported with local currency

for in-country expenses and their developmental programs in research, extension and teaching. The Nebraska Group operated, for coordination purposes, within a specific division of the AID/Ankara Mission. During the course of the contract, the Mission provided Division coordination in the sequence of Education, Agriculture, Public Administration and, again, Education.

The University of Nebraska provided early administrative support through a campus coordinating committee representing the levels of Dean and Department Chairmen and later at the Vice Chancellor level. A campus coordinator for the Turkish Program was always active during the contract period. Frequent visits were made by Nebraska campus administrators to Ataturk University and the Mission in order to strengthen the overall program.

Major Progress and Problems

Ataturk University was created and developed within an inhibiting legal framework. The University of Nebraska personnel at Ataturk University could not develop a "land-grant" type of institution under the established university laws of Turkey. Although much was accomplished toward this goal, more could have been achieved, given a favorable legal climate. Legal work of this nature must be completed at the beginning of a project. After operations begin, vested interests and tradition prevail which can prevent the change and subsequent attempts can lead to friction.

The short tenure of Rector and Dean incumbents coupled with their frequent, long absences from the campus repeatedly interrupted opportunities for continuity of program development. Only through continuous, competent administrative leadership can Ataturk University continue to develop programs beneficial to the needs of students, staff and people residing in Eastern Turkey.

Although Turkish staff qualify for administrative positions, it is the exception when they work with other than a traditional Turkish concept of administration. Future contracts of this nature should provide new administrators the opportunity of working with an effective counterpart and to participate in other appropriate learning experiences Stateside.

Contract operations were guided and coordinated by the Mission in three different divisions, within one of these divisions at two different times for a total of four "homes". These transfers, coupled with the fact mission and contract personnel were constantly changing, contributed to a lack of needed continuity of support to the contract.

GOT LEADERSHIP INPUT ATATURK UNIVERSITY 1957-1968 (Calendar Years)

	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968
RECTOR												
Özel		=====										
Kadaster		=====										
Özbek			=====	=====								
Karaca				=====								
Baykal					=====							
Özel					=====							
Baykal						=====	=====					
Hızalan						=====	=====					
Köksal (Interim)								=====	=====	=====		
Okyar									=====	=====	=====	
Ertuğrul											=====	=====
Sönmez												=====
DEAN - FACULTY OF AGRICULTURE												
Kadaster		=====										
Hızalan		=====										
Özbek			=====	=====								
Karaca				=====								
Ülkümen					=====	=====	=====					
Hızalan						=====	=====					
Kısakürek								=====	=====			
İncekara									=====	=====		
Ergene										=====	=====	=====
DEAN - FACULTY OF LETTERS AND SCIENCE												
Kadaster		=====										
Kaplan			=====									
Özbek				=====								
Özel					=====	=====	=====					
Akinci						=====	=====					
Kısakürek								=====	=====			
Yalçınlar									=====	=====		
Karataş											=====	=====
DEAN - FACULTY OF MEDICINE												
Ertuğrul										=====	=====	=====

===== Indicates single position.
 ===== Indicates additional position at the same time.
 ===== Indicates three positions at the same time.

Table 1

30 June 1968

Major Achievements

Ataturk University is a functioning institution with some emphasis on service-type programs. With United States assistance two faculties were created and developed. A third faculty (Medical) was added later to the existing University administrative structure.

Administrative positions in the Faculty of Agriculture and for five of the ten positions in the Faculty of Letters and Science are manned by qualified Turkish staff members.

Working relationships were formalized and are operating between University and Ministry officials for specified research and extension programs of import to the economic and social development of Eastern Turkey.

STAFF DEVELOPMENT

Numbers of Turkish staff in the two faculties assisted under the contract are shown by their academic status according to faculty and department in Table 2. (The total number in the Medical Faculty is also listed.)

Within the last fiscal year total staff numbers have increased from 147 to 208. The majority of increase is at the Assistant level. However, the addition at the Docent level was significant--from 13 to 19 members for nearly a 50 percent increase. No staff members departed the university through resignation during the last year. Several were granted leaves-of-absence for study abroad or for temporary duty at other Turkish Universities. Several returned to duty the last year. Several returned to duty from study abroad.

Table 3 shows a record of Turkish senior staff input for Ataturk University. Eighteen senior members of the Agricultural Faculty have contributed approximately 41 man years of service to the University. Eleven senior members in the Faculty of Letters and Science have contributed about 23 man years of service.

The number of senior teaching faculty members has increased slowly but at an accelerated rate in recent years. The momentum is expected to increase even more rapidly in future years.

A record of the Nebraska University staff members who provided assistance to the development of Ataturk University is listed in Table 4. Thirty-eight different faculty members contributed approximately 77 man years to the project of which 62 of these man years by 30 men were spent on the Ataturk campus. The remainder of the efforts

Table 2

Turkish Staff Summary - Ataturk University, June 1968

	Prof.	Dr. Doc.	Asst.	Asst.	Other*	Total
<u>Faculty of Agriculture</u>						
Agricultural Economics	1	0	3	10	0	14
Agricultural Engineering	0	2	4	9	0	15
Animal Science	2	3	2	11	0	18
Plant Science	2	3	3	18	0	26
Dairy Technology	0	1	0	2	0	3
Soil Science	1	2	3	9	1	16
Veterinary Bacteriology	0	0	2	0	0	2
Home Economics	0	0	2	0	0	2
Extension	0	0	0	0	1	1
Total for Agriculture	6	11	19	59	2	97
<u>Faculty of Science and Letters</u>						
Turkish Philology	1	1	4	12	0	18
German Philology	0	1	0	5	0	6
English Philology	0	1	0	10	3	14
French Philology	0	1	0	5	3	9
Economics and Business	0	3	4	10	2	19
Social Science & Humanities	0	0	4	8	5	17
Chemistry	0	0	0	8	0	8
Mathematics-Physics	0	0	4	7	0	11
Natural Sciences	1	1	2	5	0	9
Total Science and Letters	2	8	18	70	13	111
TOTAL	8	19	37	129	15	208
Medical Faculty						118

*Lecturers, Uzmans and Specialists

TURKISH SENIOR STAFF* INPU --ATATÜRK UNIVERSITY

1957-1968 (Calendar Years)

	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968
FACULTY OF AGRICULTURE												
Agricultural Economics Department Prof. Dr. Ibrahim Aksoz												
Agricultural Engineering Department Doç. Dr. Ziya Alkan, Doç. Dr. Hürşit Ertuğrul												
Animal Science Department Prof. Dr. Kemal Büyükoğlu (Livestock Management) Prof. Dr. Saban Karataş (Statistics and Genetics) Doç. Dr. Macit Özhan (Livestock Management) Doç. Dr. Ferit Uçarcı (Nutrition) Doç. Dr. Haluk İpek												
Plant Science Department Prof. Dr. Hasan Yüksel (Nematology) Prof. Dr. Lutfi Utkumen (Horticulture) Doç. Dr. Ali İstar (Horticulture) Doç. Dr. Fahrettin Tosun (Range Management) Doç. Dr. Selahattin Senol												
Soil Science Department Prof. Dr. Abdusselam Ergene (Soil Chemistry) Doç. Dr. Ömer Hocaoğlu (Soil Classification) Doç. Dr. Lütfi Özüs (Soil Fertility) Doç. Dr. Hayati Çelebi												
Dairy Technology Chair Doç. Dr. Ahmet Kurt												
FACULTY OF LETTERS AND SCIENCE												
Turkish Language and Literature Department Doç. Dr. Ziyazi Aki Doç. Dr. Ahmet İ. Turek Prof. Dr. Selahattin Olcay												
German Philology Department Doç. Dr. Hüseyin Sesli												
English Language and Literature Department Doç. Dr. Ahmet İ. Turek												
French Language and Literature Department Doç. Dr. Kaya Bilgegil												
Economics - Business Management Department Doç. Dr. Turhan İrfan Yüce Doç. Dr. Osman Arıkan Doç. Dr. Orhan Türkdoğan												
Social Sciences and Humanities Department												
Chemistry Department												
Mathematics - Physics Department Prof. Dr. Ahmet Özel												
Natural Sciences Department Prof. Dr. Suavi Yalvaç Doç. Dr. Mehmet Öner												

 On Duty
 On Official Leave of Absence

Table 3

30 June 1968

* Doçent Doctor or Professor Doctor Rank; periods of time when individual served as Dean not included.

Note: Faculty of Medicine not included.

Source: Secretary General, Ataturk University.

NEBRASKA UNIVERSITY STAFF IN TURKEY 1955-1968 (Calendar Years)

	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968
ADMINISTRATION-PROGRAM DEVELOPMENT					ANKARA BASED PERSONNEL									
Baker, Marvel (Chief Advisor)		1/2 Time					1/2 Time							
Hoberg, Otto G. (Chief Advisor)				1/2 Time				1/2 Time						
Allen, Harold L. (Associate Chief and Chief Advisor)					1/2 Time			1/2 Time						
Smith, Stanley A. (Architecture)														
Weigel, Paul A. (Architecture)														
Keller, Orvis (Engineering)														
Anderson, Albin T. (Letters and Science)														
Schneider, Carl J. (Letters and Science)														
ADMINISTRATION					ERZURUM BASED PERSONNEL									
Crowe, Lawrence K. (Associate Chief and Chief Advisor)					1/2 Time									
Frutchev, Cecil (Associate Chief Advisor)					1/2 Time									
Allen, Harold L. (Chief Advisor)														
Hanway, Donald G. (Chief Advisor)														
Judge, Homer (Administrative Asst.)														
Bures, Allen (Operations Clerk)														
Loewenstein, Duane E. (Chief Advisor)														
AGRICULTURE														
Crowe, Lawrence K. (Dair, Technology)														
Alexander, Martin A. (Animal Science)														
Weidon, Marcus (Soil Science)														
Harper, Horace (Soil Science)														
Kicootje, Wybe (Soil Science)														
Nerik, Otter (Agricultural Economics)														
Fenske, Leo J. (Agricultural Economics)														
Wheeler, Ernest J. (Plant Science)														
Wetling, John L. (Plant Science)														
Ross, James G. (Plant Science)														
Carter, Deane G. (Agricultural Engineering)														
Steele, John C. (Agricultural Engineering)														
Dunkelberg, George H. (Agricultural Engineering)														
Doane, Ted H. (Agricultural Extension)														
Loewenstein, Duane E. (Agricultural Extension)														
LETTERS AND SCIENCE														
Weaver, Harry L. (Botany)														
Winter, John M. (Botany)														
Swift, Lloyd H. (Botany)														
Palmer, Edgar Z. (Economics)														
Harrell, Bryant E. (Chemistry)														
Bresson, Amel L. (Chemistry)														
Collings, Wayne (Library)														
Vennix, Arthur (Library)														
Broz, James J. Jr. (English)														
Vandervort, Gordon L. (Math-Physics)														

----- Part time position
 ===== Full time position
 ===== Indicates additional position at the same time.

Table 4

30 June 1968

Table 4-A ANKARA BASED PERSONNEL

AGRICULTURE, HOME ECONOMICS AND VETERINARY SCIENCE*

	<u>Period</u>	<u>Position</u>	<u>From</u>
Allen, Harold L.	10-1-56 to 10-30-59	Extension and Info. Specialist	Nebraska
Blunn, Cecil T.	3-19-56 to 3-22-58	An. Breeding Specialist	Nebraska
Claypool, L. L.	1-30-57 to 2-2-58	Fruit and Veg. Storage Sp.	Uni. of Calif.
Conard, Elverne C.	5-21-56 to 6-4-58	Range Mgt. Specialist	Nebraska
Fox, Robert L.	9-9-56 to 12-27-58	Soils Specialist	Nebraska
Goodding, Homer T.	7-23-55 to 6-1-57	Agronomy Advisor	Nebraska
Lebedeff, Evelyn Morrow	1-5-59 to 7-20-65	Home Economist	Purdue
McKenzie, Fred	8-29-56 to 6-19-58	Artificial Insem. Specialist	Oregon State
Ray, W. W.	7-4-56 to 7-23-58	Plant Pathologist	Nebraska
Rokahr, Mary (Miss)	7-2-56 to 6-26-58	Home Economist	Nebraska
Simms, B. T.	7-4-57 to 9-14-61	Veterinary Advisor	Dept. of Agric. Wash., D.C.(Ret.)
Steele, John C.	3-22-56 to 6-14-58	Irrigation Spec.	Nebraska

*See Table 4 for Ankara Personnel in Administration-Program Development

were expended during the initial planning years at Ankara. In addition the services of 16 different United States secretaries were utilized during the 13 year period.

Major Progress and Problems

Two important problems in staff development were soon recognized by the early administrators of Ataturk University. In the first place Turkey had no reservoir of qualified staff members available for recruitment by Ataturk University. The second obstacle was that staff members subject to recruitment would not move to eastern Turkey. The salaries offered were the same as at western universities and opportunities for supplemental employment and living conditions were not comparable. Therefore, the only opportunity for staff development was to recruit new university graduates, send them first for English training, and finally as participants for advanced education in subject matter. The returned participants by law were obligated to serve two years at Ataturk University for each year devoted to study abroad.

The recruitment process was slow. English instruction for potential participants was never fully satisfactory. For about a two-year period not one single participant was sent. Early participants were not sent with the goal of earning an advanced degree. The language handicap and weak academic background prevented many from satisfactory academic performance in Stateside training programs. A few were the exception and did very well. In recent years the participants have improved their academic performance. Undoubtedly, Ataturk University would have a stronger academic program today if more of the participants had been encouraged or required to earn the advanced degrees within their capabilities.

A prime factor developed which contributed to more successful recruiting of personnel for Ataturk University. A salary differential was offered as compared to western Turkish universities. A 75 percent advantage was made in 1965 which was increased to 100 percent in 1967. By 1965 University staff housing was more readily available and the city of Erzurum was now able to offer goods and services never before obtainable.

If the University could have developed the capacity sooner to teach English effectively as an intensive course to prepare Assistants for participant training and if it had shown the ability to produce effective classroom and research support for its staff, it could now have a reputation which would attract even more and better qualified potential staff. Effective administration and improved support from the Ministry of Education through earlier developmental years could have made both possible.

Although Ataturk University is short of trained personnel, many returned United States educated staff members are not afforded an opportunity to perform at their achieved levels of competency. Law and tradition require a University faculty member to advance through the Turkish system of degrees and reach the docent level before they are considered senior staff and qualified for a full duty status. This system penalizes the person who advances major efforts with the idea of service rather than self as his goal. Performance on the job should become the primary basis for advancement in rank and salary. Only by this means can the most capable people be assigned the most responsible positions with comparable remuneration--a major source of motivation.

Major Achievements

The Rector, both Deans, all Department Chairmen in the Agricultural Faculty and the Directors of the Extension Institute and Agriculture Research Institute were participants at one time or another under this contract.

A total of 73 different young Ataturk University members were sent to the United States for advanced training. As is evidenced in Table 5, 41 of these people are presently on duty with the University, 21 will remain in overseas training for periods varying from a few weeks to a year, and 11 have resigned. The percentage who earn degrees under this program has increased in recent years. To date 26 degrees have been awarded. A majority of the 21 who remain in training are expected to return with advanced degrees, several at the Ph.D. level.

Through guidance, counsel and examples set by Nebraska staff members, the Turkish faculty is now practicing a much improved system over earlier years of staff recruitment and development. Qualifications are higher, expectations more, course work and seminars are offered and research work is more pertinent than ever before.

In the latter years of the project participants who went Stateside for advanced study were better qualified and possessed a more serious attitude toward the work as a means for their professional improvement which later would serve as a basis for their contribution through Ataturk University toward the economic and social development of Eastern Turkey.

Table 5 PARTICIPANTS FROM ATATURK UNIVERSITY

AS OF JUNE 30, 1968

	On Duty	In Training Overseas	Resigned	Degrees Earned		
				B.S.	M.S.	Ph.D.
Agricultural Economics	4	4	1	-	4	-
Agricultural Engineering	5	1	1	3	-	-
Animal Science	6	2	1	-	5	-
Plant Science	5	6	1	-	2	1
Soil Science	6	-	1	-	1	1
Dairy Technology	1	-	2	-	1	-
Bacteriology	1	-	-	-	1	-
Home Economics	1	-	-	-	-	-
Economics	5	3	-	-	4	-
Chemistry	1	1	(3)	-	1	-
Physics	2	-	1	-	1	-
Mathematics	1	-	1	-	1	-
Natural Sciences	2	2	-	-	-	-
English	<u>1</u>	<u>2</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
TOTALS	41	21	11	3	21	2

PHYSICAL PLANT (FACILITIES)

At the beginning of this program there was only an idea for the establishment of a University in Eastern Turkey. The American technicians worked in Ankara for three years before any moved to Erzurum to assume their duties. These early efforts in Ankara were devoted to the basic work necessary--enabling legislation, site location, acquisition of land, staff recruitment, curriculum development, design of buildings, etc. Soon after the enactment of the Ataturk University Law, the Government of Turkey acquired 10,000 acres of land near the city of Erzurum and 3,000 acres near the city of Elazig, 200 miles southwest of Erzurum. The majority of land acquired has been used for farming, agricultural research and demonstration work.

When Ataturk University opened its doors to students in October, 1958, inadequate facilities were rented in Erzurum. Construction was slow in starting on the area of land designated for the campus and then lagged behind schedule. In the spring of 1962 four apartment buildings for staff members were completed. In March 1963 the first classroom and laboratory building was nearly completed and classes for the spring semester were conducted on campus. These facilities, although insufficient, made Ataturk University an operating institution on its own campus.

Farm buildings were constructed and included three barns with open pen stables, one poultry complex on the University farm and two more buildings some distance away for departmental work, and several machinery and miscellaneous buildings. Other buildings were present on the University Farm when the University obtained title to the facilities.

Beginning in late 1965 considerable campus improvement and building maintenance were initiated. Leveling of the land was done and campus roads and streets were asphalted. Simple landscaping was inaugurated. Building repairs were made as needed although the attempts were not always successful, e.g. roofs which had been repaired continued to leak.

Through the ensuing years, construction of needed buildings continued. A recapitulation of this program as of June 30, 1968, and the year of occupancy for each building follows:

1. One 40-unit three-bedroom apartment building for staff (1962).
2. Two 24-unit each, two-bedroom apartment buildings for staff (1962).
3. One 32-unit bachelor apartment building for staff (1962).

4. Science building (1963).
5. Social Science building (1964).
6. Student dormitory (1965).
7. Two 24-unit each, two-bedroom apartment buildings for staff (1966).
8. Student dormitory (1967).
9. Library and University Administration building (1967).
10. Soil and Plant Science building with auditorium and accompanying greenhouses (1967).
11. Rug making and living quarters complex (1967).
12. Three 8-unit each, two bedroom apartment buildings for staff (1968).
13. One bachelor apartment (32 units) (1968).

The following buildings were nearly completed:

1. Two Medical Faculty buildings.
2. A third dormitory.

The following buildings were well underway:

1. The Agricultural Administration, Animal Science and Economics complex.
2. Four 8-unit each, two-bedroom apartment buildings for staff.
3. Two bachelor apartment buildings, each 32 units for staff.

The following buildings were in the planning stage:

1. One ten-story University Hospital building.
2. One central heating plant.
3. One University Student Union type building.
4. One Agricultural Engineering building.

Building materials in eastern Turkey are extremely expensive. The Government of Turkey has provided all the funds necessary for the building program. As with other Turkish governmental agencies, the University also provides housing for its professional, clerical and service staff members at nominal costs to the employers.

The student dormitory units are not under the jurisdiction of the University. Little control can be maintained over their operation or student discipline by University administration.

The University campus is achieving new dimensions each year. Present emphasis is on campus beautification by leveling additional areas of land, landscaping the more spacious areas and the planting of literally thousands of trees. This work is being completed through active participation of several faculty members.

Several faculty members have expressed the hope the University campus, among other things, will develop and become the cultural center of eastern Turkey, in both appearance and available facilities.

UNIVERSITY PROGRAMS

Resident Instruction and Student Affairs

The teaching function is basic to any university. The teaching-learning process should broaden the horizons of the student by providing opportunities for the development of an understanding of social, economic and political problems and an ability to help solve them.

1. Faculty of Agriculture

The Faculty of Agriculture was established at the outset. Two majors were offered during the 1958-59 school year--Agricultural Economics and Animal Science.

At present, five majors are offered in the Faculty of Agriculture: Agricultural Economics, Animal Science, Soil Science, General Agriculture, and Plant Science.

Two other departments, Agricultural Engineering and Agricultural Technology, have been established; as yet students are not admitted to them. In addition, the small Home Economics staff is attached to Agricultural Economics for administrative purposes.

The Agricultural Faculty students also receive courses in the basic sciences, languages, Turkish literature, and history. The basic sciences include chemistry, mathematics, botany, zoology, bacteriology, genetics and physics for soil science students only. The new regulation requires all students to enroll for physics. A student may select German, French, or English as his foreign language. Presently English is the most popular selection.

The courses of instruction which the students receive are set forth in the Teaching and Examination Regulations of each faculty. For brevity the regulations are usually referred to as "Student Regulations".

The Agricultural Faculty has had three sets of Student Regulations since its inception. The original set was revised in late 1961, and adopted in January 1962. Again in 1967 the regulations were revised and have been adopted. However, adoption came late and will apply to the entering students in the 1968-69 school term.

The 1962 regulations specified a four-year (8 semester) course of instruction for a total of 144 credit hours required for graduation.

The requirements within a major are very rigid.

There are some basic differences between the new and the old regulations. The 1967 Student Regulations specify a five-year course of instruction, instead of four. A total of 184 credit hours are required for graduation.

Prior to the adoption of the 1967 regulations a committee composed of Professor Fenske, Chairman; Professor Doctor Kroontje; and Docents Tosun, Alkan and Goksu, worked on revisions. This committee proposed a prerequisite system, elimination of make-up examinations, and a probationary system. However, the General Faculty Committee rejected all of these features in their entirety. The new regulations, as finally accepted, resemble those of the old universities.

2. Faculty of Science and Letters

The Faculty of Science and Letters was also established when the University opened in 1958.

At present five majors are established in this faculty: Turkish Language and Literature, German Language and Literature, French Language and Literature, English Language and Literature, and Economics and Business. The Physics-Mathematics Department is newly created but lacks approved majors and has taken no students as yet. A major in chemistry has been proposed by the Faculty, and submitted to the Minister of Education for approval.

An eight-semester course of instruction is offered in the Faculty of Science and Letters. A student must complete 144 credit hours. Each semester in both Faculties is approximately 17 weeks in length, including 15 weeks of class instruction and two weeks of final examinations.

Each department prepares its own curriculum and submits it to the Dean for approval. The department must set up prerequisites for the courses offered. A student cannot go on to the advanced courses unless the prerequisites have been met. This is a decided advancement over the Faculty of Agriculture regulations.

The students for the Faculties of Agriculture and Science and Letters are selected through entrance examinations given by the Turkey-wide Central Examinations system. For the country as a whole only one in fifteen taking the entrance examination is admitted. This ratio should mean only good students in the University, but in practice some poor students are admitted.

The prospective student states his choice of (1) University, (2) Faculty, and (3) Major in his application. His entrance examination score will then determine where he attends and in what subject he will major. Often he will be in a branch of study far removed from his interests.

Major Progress and Problems

Numerous problems in the areas of Resident Instruction and Student Affairs were encountered during these initial years of Ataturk University's development. Several student strikes or boycotts took place. A general strike occurred in the spring of 1963. In 1966 graduation exercises were suspended due to student unrest. Minor incidents occurred frequently. A general boycott of Agricultural Faculty classes took place the last four weeks of this contract period. Students lack sufficient extra-curricular activities and facilities for sports and social occasions. There are few opportunities presently available to occupy the students time in a constructive fashion. The long-range building plans include facilities which could greatly alleviate this situation.

The registration of students by class advisors has operated relatively well. The advisor system was introduced about five years ago. The main difficulties are (1) each advisor handles 30 to 40 students, too many for careful analysis of each student's program and progress, and (2) there is a tendency for advisors to allow the students to take from 20 to 25 credit hours per semester. The old regulations did not specify exactly the course load limits. However, the new regulations do, and if adhered to, this problem will be solved.

Late registrations have always been a problem, even though the Faculty authorities have set final dates for registration. First-year students may report late through no fault of their own. They often receive late notification that they are accepted to a university. Ataturk University begins classes about one month ahead of the other universities, thus a late notification of acceptance to Ataturk University causes the student to be as much as a month late. This problem can only be solved at the national level.

The actual scheduling of classes is done on a faculty basis, and semester by semester. Committees are appointed in each faculty to arrange the class schedules. Inherent in this system are several problems. Independent scheduling by faculties accords no coordination between the two faculties. This causes many conflicts when students wish to take courses across faculty lines. In only one period (1962 to 1965) were coordinated efforts made. A change of deans and new appointments to committees disrupted this unified effort. The class scheduling should be a university-wide function. Semester to semester preparation of class schedules is time consuming and repetitious. A schedule covering at least two years should be made in advance, with provisions for minor adjustments.

Shortage of course offerings causes crowded programs. The basic courses required by all students should be offered each semester rather than once a year, or even every other year. As a result of failure to do this, many classes become extremely large and unwieldy.

Lack of instructors for certain required courses causes difficulties. Because of the rigidity of the Student Regulations course substitutions are not permitted. The students must take the courses specified. The University authorities have often been unable to provide the needed instructors. Some instructors do not accept the official class program. Some instructors for personal reasons will change hours, days, classrooms or combine sections without consulting the dean or anyone else. This situation has been overcome in part, but not completely.

Under the present system students who fail courses during the school year have one or more rights of taking a make-up examination. If this examination is passed, the student then receives a passing grade in the course. Although the make-up examination system is widely used throughout the universities and public schools of Turkey, it has some serious drawbacks.

The most serious defect is that the incentives to study during the semester are greatly reduced. The student always has it in his mind that if he fails in the regular examinations he still has another chance. Elimination of this examination would improve study habits and class attendance. Another defect is found in the large amount of extra work imposed upon the instructors and the Student Records Office. It is difficult to maintain records of who is and who is not eligible to take any given make-up examination.

The personnel in the Student Records Office are doing a reasonably good job under the circumstances. They are handicapped by staff shortages, limited space, limited filing cabinets and little or no equipment other than typewriters. All work is manual including posting and duplication of transcripts.

Certain improvements in registering procedures have taken place since the inception of the University. For example, individual cards are now used for each course for which the student registers. These are turned in to the instructor at the beginning of the semester, and also serve as the grade protocol at the end of the semester. Prior to this, all the student's courses were on one card which was then turned in to the Records Office. It was impossible under the old system for the instructor to secure an official list of students enrolled in his course.

There are some shortcomings in the area of the records section also. The students have too free access to the office. This is partly due to limited space. The students or parents do not receive an official report of grades at the end of each semester. None are ever issued. Official warnings of dropping below passing grades are not given out. Sometimes an early warning would cause the student to make a greater effort. Official lists for make-up examination

eligibility are not issued. The responsibility remains with the instructor. Difficulties arise when instructors change.

The University officials should upgrade this office. Present methods of recording and posting grades will not suffice once the student body becomes much larger. The University of Nebraska offered Ataturk University major assistance in the areas of Student Affairs and Records in early 1966 but Ataturk University officials did not accept the proposal. Earlier during the contract period support on an informal basis was provided through the efforts of several Nebraska Group members.

The students in each faculty are officially organized. However, their organizations stand completely apart from the University itself. The University officials have no formal control over them. The relationship between the student organizations and the University is much the same as between a labor union and management. This system prevails throughout Turkey.

The students have also organized several clubs such as the Economics, Animal Science, Sports and Music Clubs. In most instances interested faculty members assist them in these efforts. In addition student groups give teas, balls, plays, tours, and assist in observing historical events. All of these are worthwhile activities. The University officials should encourage them even more than they do now.

Recommendations

A few overall recommendations follow:

a. The University should have a Dean of Students. Presently each faculty dean is serving in this capacity. They have enough administrative duties without student problems.

b. The Student Regulations of each faculty should be unified so that starting and ending dates of a semester are the same, and the regulations pertaining to examinations are the same. There is a need to develop the "University concept" rather than separate "Faculty concepts".

c. A University catalog should be published setting forth the usual pertinent information concerning the University in one bulletin.

d. Every effort should be made to further improve the curricula, course contents, and methods of teaching. A permanent University-wide committee should function in this respect.

Major Achievements

Seven departments in each of the Faculties of Agriculture and Science and Letters were developed. Five majors are offered in each Faculty.

The Faculty of Science and Letters provides basic science and English courses to Agricultural Faculty students.

Each semester is approximately 17 weeks in duration. No other University in Turkey offers a longer semester period for classroom and laboratory learning opportunities.

Graduation requirements have increasingly demanded the fulfillment of higher standards. A more highly qualified graduate is the result.

In one faculty, Science and Letters, a course prerequisite system is in operation. This is not a usual procedure in Turkish Universities.

An improved system of student registration and faculty advising is in operation. The student records office has developed a workable system for at least the present time.

Definite plans are being programmed for student activity improvement in the form of facilities and programs.

AGRICULTURAL FACULTY

Agricultural Economics Department

The Agricultural Economics Department was established at the beginning of the University as an integral part of the Agricultural Faculty. Responsibilities of the department include teaching, conducting research on the many economic and social problems in the area, disseminating information through extension activities, staff development, and overall university development.

Two University of Nebraska professors served in the department, Doctor Ottar Nervik from October, 1957 to May, 1961 and Mr. Leo J. Fenske from October, 1960 through June, 1968. Professor Fenske was Department Chairman until June, 1967, when a qualified Turkish staff member assumed the position.

Major Progress and Problems

1. Teaching

In the beginning two courses were taught by visiting instructors from the Istanbul University Economics Faculty. The present curriculum includes fourteen Agricultural Economics and six Economics courses. Improvements in curriculum and course content were made principally through the guiding efforts of American professors.

The major teaching problem in the Department throughout the years has been the shortage of senior staff. To partially alleviate this situation several means were employed.

Outside assistance was secured from other universities. Both Istanbul and Ankara Universities provided staff on a loan basis, especially in the area of general economics. The chief drawback was that the instructors could only come for a short time. Accelerated courses had to be offered.

Lecturers were named from within the Department. Through special arrangements Ataturk University was permitted to advance well-qualified assistants to lecturer rank to help fill the gap. Two Assistants, both with Master's degrees from Montana State University, ably served in this capacity since January, 1965. One senior member has been available since late 1962. The release of the first returned participant trained in Agricultural Economics to Ege University hampered teaching in the Department since nearly the inception of the program.

Both Professors Nervik and Fenske served as instructors and taught through interpreters. Professor Fenske has taught or closely supervised all course offerings for the last eight academic years.

Another problem, and one that still exists, was the shortage of textbooks and enough reference material in Turkish to meet student needs. In many courses, the class notes of the instructors were mimeographed and distributed to the students. Research findings have been mimeographed and one textbook and two bulletins have been published for student use.

The student enrollments in Agricultural Economics along with the numbers graduating by years are given below:

<u>School Year</u>	<u>Number Enrolled</u>	<u>Number Graduated</u>
1958-59	79	--
1959-60	25	--
1960-61	0	--
1961-62	35	76
1962-63	25	22
1963-64	55	4
1964-65	32	26
1965-66	35	25
1966-67	40	44
1967-68	<u>41</u>	<u>?</u>
Totals	367	197

2. Research

Twelve research projects have been formally registered with the Ataturk University Agricultural Faculty Research Institute. Areas included for research were farm power used, economic analysis of sugarbeets, livestock enterprise, structure and problems in Agriculture, alternative uses of resources, multiple uses of water, farm organization, livestock feeder enterprises, farm record keeping system, problems of small farms, cost of living and retail prices, and a study of meat prices and trends. All were limited to a special group or geographic area.

The staff members of the Department also conducted special studies upon request of other departments and University officials for use in expanding work in Rural Sociology, Extension and the University Farm.

The agricultural structure of Eastern Turkey is of a nature to necessitate wide-spread research in all phases of agricultural economics and rural sociology. Research of this type will be undertaken as staff develops and funds are made available. The research

visualized in the near future is in the general areas of production economics, farm management and record, farm credit and cooperation, land economics and tenure, marketing and prices, and population movement and changes in family structure.

Research in Agricultural Economics has been handicapped due to shortage of trained staff, heavy teaching loads which take precedence over research activities, insufficient funds, lack of transportation and slowness in the publication of results. The department expects to overcome these problems through time, as resources for research will normally be increased. The Agricultural Economics Department is recognized as occupying an important role in fulfilling the research needs of Eastern Turkey and was developed with this major task in mind.

3. Extension

The Department has contributed toward the Extension efforts of the Agricultural Faculty. Staff members participated in short courses for extension agents, regional agricultural school teachers, and provincial extension directors. Numerous trips to villages were made to assist farmers. One survey to identify problems in one village and two similar surveys at the provincial level were conducted. The Department has assigned one staff member to serve on the University extension committee.

The extension activities of the Department were restricted due to the limited number of staff who already were committed to teaching and conducting research and the staff members were not adequately extension oriented. Special efforts were made to partially solve the problem. One participant was sent to the University of Nebraska for extension training. However, upon his return he entered the Turkish military forces to serve his compulsory duty. He will not be available for Agricultural Economics extension work for another year and a half.

Future plans include the development of an extension program for the Department. This plan will be coordinated with the University Extension Institute.

4. Staff Development

Much emphasis was given to staff development within the Department of Agricultural Economics during the contract period. Professor Fenske devoted much time and effort toward staff recruitment and training.

Potential staff members at the senior level were not readily available from other Universities. At the Assistant level conditions were not conducive to employ from other universities and they, too, were in very short supply. The recruitment program became effective when the department began placing their own qualified graduates on the staff.

The Department is presently staffed with fourteen members. Nine men received training or are still in training under the contract participant program. Eight men are graduates from Ataturk University. Four of the staff earned M.S. degrees and four others, two each at the M.S. and Ph.D. levels, are working toward their degrees in the United States.

Three members have earned Turkish Doctorates within the department. The present Chairman has advanced through all the Turkish degrees.

Several other personnel recruited for the Agricultural Economics Department have transferred to the Economics and Business Department.

Major Achievements

The Department of Agricultural Economics was developed to the point where qualified Turkish staff are available to maintain and improve departmental programs.

The curriculum includes an adequate number of sufficient quality of courses to meet the present teaching needs. Students have access to written materials for their classwork.

Considerable pertinent research was conducted, some is underway, and other is planned which has been and will be useful in the economic and social development of Eastern Turkey.

Extension activities were conducted and an improved extension program is planned for the future.

Agricultural Engineering Department

The desirability of an agricultural engineering section in the new Ataturk University was recognized from the onset. In the original concept of the University there was to be, among others, both a Faculty of Engineering and a Faculty of Architecture. The formation of both of these Faculties was put off until a later date. However, agricultural engineering was included as a part of the section of General Agriculture which was not a department, but directly under the Dean of Agriculture. In 1967, agricultural engineering was recognized as a separate department under the name Culture Technic (Technical Farming). Since 1961, agricultural engineers have taught service courses to students majoring in other departments of the Faculty of Agriculture. As yet, no students have been offered a major in this department.

An extremely important role should be played by agricultural engineering at Ataturk University. Engineers are needed to help solve the engineering problems of agriculture in teaching, research, and extension. Regardless of advancements in the other disciplines of agriculture, the full development will never be realized without an application of engineering principles.

The present staff has the nucleus to develop a professional agricultural engineering department. No foreign concept of agricultural engineering can be wholly adopted, but a system to fit Turkish conditions will have to be developed by Turks. More foreign training and equipment aid would be of great help, but the future of agricultural engineering will have to be decided by those who are foremost in training within the country.

Major Progress and Problems

The present department chairman was the first staff member and the first participant in agricultural engineering. He was sent to the University of Nebraska early in 1957. Since that time, 16 Turkish members and three visiting Nebraska professors have been active in the department.

Seven of the 16 Turkish staff were, or are, participants under the AID/Nebraska program. These seven have spent a total of over 16 man years in the United States most (but not all) of the time as AID participants. The three Nebraska professors have spent nearly six and one-half years at Ataturk University.

Three of the 16 staff members have studied in Austria and Germany for approximately five and one-half man years. Only one of the 16 has resigned. One man is presently studying in Germany and

two are AID/Nebraska participants in the United States. Three of the seven participants earned B.S. degrees (one earned two B.S. degrees).

Of the 15 present staff members assigned to Ataturk University two are Doçents, four are Doctor Assistants, and nine are Assistants. Of the nine Assistants, five have been with the department one year or less, while the other three have been staff members only two years.

Without the recruitment of new senior staff members, the most optimistic staff rank by 1970 would be two Professors, four Doçents, and four Doctor Assistants.

There has never been any success in recruiting senior staff--all members of the present staff started at Ataturk University as assistants. Even if the desired ranks are achieved, the staff will be especially weak in number of members with basic engineering training.

Nebraska professors have not taught courses at Ataturk University in agricultural engineering subjects. There has been no shortage of Turkish staff qualified to teach the relatively few service courses offered and the only interpreters available were those who were able to teach the courses themselves.

While the total number of staff is quite impressive (and certainly both desirable and necessary), previous comments emphasize its limited effectiveness. Six of the junior staff have also yet to fulfill their military obligations. From a staffing standpoint, an agricultural engineering major cannot be started before 1970 and it is doubtful if a four-year course could be carried through to completion by the time those entering in 1970 would be in their last year. The trend in Turkish universities is toward five-year curricula but such a movement by Ataturk University would not relieve the staff pressure, to a great extent, in this department.

Building facilities for agricultural engineering are now only in the initial phases of preliminary planning. Judging by past performance, no special facilities can be expected before 1972. No campus building, at present, is suitable for use as a shop or as a machinery or farm equipment laboratory. In fact, no present campus structure has been designed with even rudimentary service entrance facilities.

Since there is no Engineering Faculty at Ataturk University, an agricultural engineering major will mean that all basic engineering will have to be taught by the agricultural engineering staff. Such a situation is not impossible and is being accomplished at several locations in the world. However, for an equal number of students, a greater number of staff and more facilities and equipment are necessary than would be required in a university with an engineering faculty. This fact must be recognized.

There is a bright side to the situation described when viewed from a long-range point of view. At some future time, an engineering faculty will, no doubt, be established at Ataturk University. Any facilities, equipment, or staff acquired for agricultural engineering now, could be the nucleus for an engineering faculty to follow.

In Turkey, a graduate of the agricultural faculty of a recognized university is called a "High Agricultural Engineer". These graduates have finished in a curriculum which contains certain, but unspecified, basic or engineering-related courses such as surveying, irrigation or farm machinery. While there is much to be said for including such courses in agricultural curricula, the conferring of the title of High Agricultural Engineer on a graduate in Animal Science or Agricultural Economics is confusing.

The result is that Turkey is flooded with thousands of graduates who carry the title of "Agricultural Engineer" who have not been exposed to the basic essentials of true engineering other than some of the technical aspects. Hundreds are being added to this group each year. These people are not looked upon favorably by Turkish engineers in the fields of Civil, Mechanical, Electrical, Chemical, Mining and Metallurgical Engineering. Moreover, professional engineers in the field of agriculture, although desperately needed in Turkey, have a most difficult time obtaining support and status from administration.

Although the name "Agricultural Engineering" was desired by the staff at Ataturk University, to conform to the concept in most advanced western countries, they were compelled to settle on "Cultural Technic and Agricultural Equipment and Machines". While a name is not the most important problem facing the agricultural engineers at Ataturk University, it is one more handicap to be overcome in an already difficult situation.

Since agricultural engineering has not achieved anywhere near the status it deserves, it is not well understood by university administrators in Turkey. At Ataturk University, not only are there no facilities suitable for laboratory work, but equipment is almost entirely lacking. Despite great effort, only a relatively small amount of equipment through the excess property program or by purchase have become available either through Turkish or AID contract channels. During the last year there was small improvement in this situation.

Major Achievements

An Agricultural Engineering Department was developed and a sufficient number of staff trained that now can serve as the necessary nucleus for future expansion.

Plans for a major curriculum and a new building for classroom and necessary laboratory work are underway for the department.

Staff members have achieved an attitude permissive to the future growth and development of the department.

Animal Science Department

The animal industry is an important one in eastern Turkey. About 85 percent of the total land area of this sector is in pasture, wasteland and fallow. In order to utilize the rough terrain animals are kept for grazing purposes. About 75 percent of the total value of agricultural production in the northeast region comes from livestock and livestock products. Animal numbers have been steadily increasing in this area. The founders of Ataturk University recognized the need for an Animal Science Department at the outset.

Major Progress and Problems

1. Teaching

Four instructors came from the Ankara University Agricultural Faculty for one month each to give courses in this field. In addition two of the top administrators were in this area of instruction. Professor Doctor Kadaster of Ankara as Dean of Agriculture and Acting Rector was in this field. Professor Doctor L. K. Crowe was the first Nebraska Party Chief at Erzurum. His interests were in Dairy Technology.

Professor M. A. Alexander of the University of Nebraska arrived in Erzurum on October 10, 1959. He continued as Animal Science advisor and as Professor of the department until October, 1963. During this four-year period he laid a strong foundation for the Animal Science Department through his teaching, staff building, research, village extension work and assistance to the overall development of the University.

2. Course Requirements

All Agricultural Faculty students are required to take the introductory courses, Animal Science 1 and Animal Science 2. These courses are now given in the second year of a student's program.

The courses in the Animal Science Department, required for all department majors include 15 courses or a total of 38 credit hours.

In addition to the formal course work the students must work two months on a livestock farm for practical training and experience. It is recognized that this period is much too short, and steps are being taken to revise this feature.

Most of the graduates enter Extension work or are employed on Government livestock farms.

3. Staff Development

The Animal Science Department staff is the largest and strongest in the Agricultural Faculty. At the beginning of the participant program several Ankara University graduates were recruited and sent to the United States. At present these men hold the rank of Professor or Docent Doctor. The present staff consists of two Professors, three Docent Doctors, two Doctor Assistants, and eleven Assistants.

Eight men have received or are receiving training in the United States, mostly at the University of Nebraska. Two men have received training in Germany and one each in France and Australia. Professor Alexander was involved in training the earlier staff members, with four receiving their Turkish doctorates under his advisorship.

Professor Doctor Biyikoglu is now the Department Chairman. Professor Doctor Karatas of Animal Science is presently serving as Dean of Letters and Science.

4. Research and Related Activities

The Department has engaged in 28 research projects to date. Of this number 15 have been completed, 5 cancelled, and 8 are still in progress. Eighteen technical and research bulletins have been published by staff members to date. Others are being readied for publication.

Much of the research has been of a practical nature, including feeding experiments with calves, yearling cattle, and lambs. Breeding experiments have been carried on with sheep and cattle. Poultry experiments have also been conducted.

A foundation herd of 16 heifers and 1 bull of the Brown Swiss breed were purchased in Switzerland in 1963 by Ataturk University. These animals and their increase have proven out well. The University also has a purebred Merion flock of sheep and a flock of native sheep. All of these animals are housed in open shed, an innovation for eastern Turkey. The results have been good.

In 1967 plans were developed by Docent Doctor Haluk Ipek and Professor Loewenstein for a Poultry Improvement Program. Special emphasis was given toward disease control and nutritional factors. In early 1968 eggs from pullorum-free flocks of improved breeds were obtained to initiate the meat and egg production program designed for both research and extension purposes.

5. Extension

Professor Alexander's extension activities were mentioned earlier. Later on Professor Doane, also from Nebraska, served in a dual role of Extension Advisor and Animal Science Advisor. He also

was active in demonstrating improved livestock practices to the villagers.

Under the guidance of Professor Loewenstein, Extension Advisor, Professor Doctor Biyikoglu, Chairman of the Department, became engaged in a broad extension program in Kars and Erzurum Provinces. Feeding demonstrations and herd improvement through milk record keeping, culling, and the use of good sires are being carried out in 40 villages. The villagers receive instruction and aid in carrying out approved practices. A total of 108 purebred Brown Swiss sires have been distributed to the cooperating villages. This program can have far-reaching effects on the livestock industry in the area if fuller cooperation from Agricultural Faculty members can be obtained.

6. Dairy Technology

The Dairy Technology activities were first centered in the Animal Science Department. Recently a separate department was formulated with Docent Doctor Ahmet Kurt as head. He has two assistants. No students are majoring in this branch as yet.

The Dairy Technology Department has a modern dairy processing facility with which to work. However, it has not been put into full operation to date. A lack of in-country manufactured bottles prevents the use of the milk pasteurizing and bottling sections of the plant.

Major Achievements

The number of qualified staff with their extensive formal training and job experiences places the Animal Science Department in a strong position to conduct an effective coordinated program in teaching, research and extension work.

Experimental research and extension programs have and will continue to assist the villagers of eastern Turkey to improve their farming practices and receive economic gains and social improvement.

A modern dairy processing plant was built and equipped. The plant will become fully operational upon receipt of glass milk bottles from an Istanbul factory.

Plant Science Department

The Plant Science Department was organized into three main sections--General Crops, Horticultural Crops and Plant Protection. All crops and aspects of the factors affecting production with the exception of soil science were covered under these. As staff were trained through the years the various subject matter fields were taught and programs of research started in each field.

Since shortages of well-trained staff in other universities made it impossible for Ataturk University to hire academic staff from elsewhere in Turkey, it was necessary to train staff at Ataturk University in conjunction with the participant program through the AID Nebraska contract.

Land for field research was obtained from the former Seed Research Farm in the fall of 1960. Various horticulture crops such as sweet corn, head lettuce and tomatoes were tested in 1961 and found to be well adapted to the region. Research projects were outlined and given a number under the supervision of Dr. Fahrettin Tosun who in 1961 assumed this administrative responsibility as Director of the Research Institute in addition to his other duties of teaching and research.

The duties of the American Professors at first included accepting responsibility as department chairmen and giving leadership in the organization of the departmental functions including division of the departmental researches and teaching assignments and budgeting of resources. As advancement in rank and experience took place, these leadership responsibilities were assumed by a chairman appointed from the Turkish staff. Accordingly after Professor John Weihing's departure in February, 1966, Doçent Dr. Hasan Yuksel became chairman of the department. The role of the American professor when Professor James Ross arrived in March, 1966 was entirely changed to one of advisor only since all power of direction centered in the chairman.

Major Progress and Problems

The Plant Science Department has assumed its role in the University from the standpoint of developing a teaching program for a degree in Plant Science as well as undertaking a program of research within the Research Institute designed to solve some of the problems of crop production of the area. In addition the need for extension has been recognized and a program planned within the framework of the Extension Institute.

1. Staff Development

For the purpose of carrying out responsibilities the department was effectively organized and qualified personnel assigned to each of the sections. A total complement of 26 individuals are now in the department whereas in 1960 when Professor Wheeler first came, there was none. Of the individuals trained in the United States only three at present have degrees, one a Ph.D. and the other two an M.S. Of those now at the University or on temporary leave, five have taken training but have not received degrees. In addition there are seven now receiving training leading to the M.S. degree or in some instances possibly the Ph.D. This means that a core of 14 individuals with graduate courses and training will have been established which will provide the means if properly organized for coming to grips with the plant science problems in the region from the standpoint of the three roles of teaching, research and extension.

2. Teaching.

The department first began functioning with the arrival of Professor J. Wheeler at Ataturk University in September, 1960. Though a tentative curriculum had been formulated previous to his arrival no courses had been taught. In the first semester two hundred students were enrolled in General Plant Science, course material was outlined, and three assistants were appointed who had previously been working at the Ministry of Agriculture. With the help of these assistants a course for the year was prepared and a portion of the subject matter translated into Turkish.

During the past three to six years 30-40 students have been registered for majors in Plant Science. As the staff training progresses the numbers may be increased somewhat but classes have a maximum of approximately 100 for effective teaching especially if laboratories are a part of the instruction. It is expected that course offerings may increase as additional staff becomes available and the range of research work increases.

The main difficulty at present is to maintain sufficient staff to teach the courses necessary for student graduation. Assistants have often taken the main load of teaching when they do not have sufficient training. This situation will be alleviated partially as the participants return but the problem of training the new assistants will still remain.

3. Research

The research projects are conducted within the framework of the Research Institute and mainly are the basis for doctoral or doçent theses. There are long-term projects, however, which are carried on

irrespective of the degree requirements of individuals. These give a continuity to the attack on the agronomic problems of the region and are not terminated with the completion of a degree. Fifteen projects are now in progress. These represent an attack on some of the most important problems in the area particularly in the field crops section where more adequate staffing has been available.

The leadership given by the Research Institute Director, Fahrettin Tosun, has been felt particularly in the Field Crops Section where the work has been exemplary in laying the base for research which will provide answers necessary for raising the living standards of the people in Eastern Turkey. A twofold approach has been planned. First, the raising of yields of cereals are being demonstrated by moisture conserving summerfallow techniques, optimum time of seeding, fertilizer use, control of crop diseases and insects and use of high-producing genotypes. Second, in conjunction with this, the improvement of forages quantity and quality through establishment of forages on the high-producing more fertile land and also increases of pasture yields on renovated grazing land are being demonstrated. These efforts are designed to raise nutritional and living standards of the people by increasing the quantity and quality of human food. Increasing cereal and forage production will effect an increase of food for both man and grazing animals.

Research reports are published in the form of Doctoral and Doçent theses which unfortunately at this date have not been printed because of the inability to make the printing facilities fully functional. Reports in the Annual Report of the Research Institute and also bulletins published by the Research Institute also are means by which the results are made available for other researchers and to a limited degree to extension personnel.

4. Extension

An Extension Institute for the Agriculture Faculty is available for disseminating information to the people in Eastern Turkey. Contributions to a monthly bulletin being edited by the Extension Director, Ahmet Kurt, are solicited from staff members. Professor Doane who originally helped to set up the Institute in 1965 had established the tradition of a news letter which was sent to Extension and other agricultural technicians in Eastern Turkey. A field crops village demonstration program is presently underway.

Major Achievements

The Plant Science Department has made significant advances in providing adequate training for undergraduates and also in starting broad based research designed to tackle the basic problems of crop

production in Eastern Turkey. There has been an appreciation learned of the need for such programs and a sound approach toward meeting this need has been developed.

A large pasture experiment designed to show the effect on animal produce by replacing low-producing forage plants with high producers is now set up and ready for grazing this spring.

In addition to these experiments the availability of high-producing vegetables adapted to the eastern region has been made.

These experimental results, however, will have to be translated into performance in the farmers' fields. This will take a full scale program of extension making use of all the technical resources that can be mobilized and involving a demonstration of all the factors contributing to production in the areas where they will be applied. The problems and possible solutions have been discussed by Professor Ross in reports of experiments conducted on the Research Institute Research Farm.

The field laboratory equipment acquired through American AID funds provide the means by which not only the research can be more effectively executed, but also they provide means by which demonstrations and tests in other locations can be made.

The part of the American professors in the Plant Science Department has been extremely important in welding an effective staff from the time when no one was available when Professor Wheeler first arrived until the Nebraska contract ended in 1968. Professor Wheeler laid the groundwork for an effective curriculum in teaching and demonstrated a service-type of research designed to meet the needs of the area. Professor Weihing made the necessary administrative adjustments and gave additional direction to the researches in Plant Science from a broad viewpoint. Professor Ross has filled a purely advisory role since the department chairmanship has evolved into Turkish hands. This was the original design as staff development progressed. He has strengthened a major weak portion of the program, that of cereal production research. Demonstration of the terrific potential for cereal yield has been made and the necessary factors for achieving this potential have been pinpointed.

Though the effect of the leadership exerted by visiting professors from a foreign culture appears at the time to be less consequential than would be hoped, the long time effect may be more far reaching than one can visualize. The design of combining on-the-spot foreign leadership with Turkish participant training in the modern university concept and techniques should in the long run cause a channeling of human and financial resources into the type of overall service which will be felt within the economic and cultural patterns of eastern Turkey. This will require genuine leadership ability combined with selflessness in service which will rise above the monastic philosophic concept of university function now current within the classic universities of Turkey.

Soil Science Department

The Soils Department was organized in 1959 with Professor Weldon as the only professor in the department. Under his leadership a curriculum was drawn up and approximately 136 students enrolled in the first course in Soils. Assistant Dr. Abdusselam Ergene and Assistant Omer Baykan, both of whom completed periods of study in the United States under the participant program, were of great help in establishing the functions of the department. Dr. Ergene, now Department Chairman, acted as a counterpart and gave leadership with Assistant Baykan (since resigned) in the teaching of classes and laboratories and also research planning.

Major Progress and Problems

The soils of Ataturk University Farm were surveyed in 1960 and 70 samples analyzed for physical and chemical properties. Plans were laid for fertilizer experiments on sugar beets, wheat and barley. Responses to nitrogen fertilizers were obtained but none or very little to phosphorous.

Problems in laboratory soil analysis relevant to soils in eastern Turkey were undertaken by participants studying at the University of Nebraska.

A month after Dr. Weldon's departure in April, 1961, Dr. H. J. Harper arrived to give leadership to the department. He initiated a series of studies involving sugar beet fertilization, fertilizer application to potatoes in peat soils in the valley bottom and mineral soils on higher elevation, sweet corn and millet fertilizer studies and effect of water table on production of crops on peat soils. In addition he made surveys of soil problems in the Black Sea and Kars areas. Dr. Harper's untimely death in the fall of 1961 caused a temporary disruption of development plans. The staff had grown with the addition of three assistants and the two senior members had advanced in rank to Doçent and Doctor Assistant. One member has earned a Ph.D. degree and two M.S. degrees. In addition three members of the department have had training in the United States. All of the senior staff members have had academic experience abroad in service-type universities.

Research projects dealing with analysis and surveys of the soils on the University Farm were continued, and problems in salinization in the Igdir Valley on the Russian border were investigated.

During Dr. Kroontje's tenure from 1963-65, encouragement was given to interchange results from soils investigations in various parts of Turkey by the formation of a National Soil Science Society

of Turkey. Dr. Kroontje took a leading part in getting this society started and delivered the main address at the first meeting in Ankara in May, 1965. Cooperative work between the University and Topraksu, the soil conservation agency, was established. A soils testing laboratory at Erzurum was started with the encouragement and participation of University staff members.

Nine research projects were started prior to and during the 1963-65 period dealing with problems in the eastern region. The emphasis at the present time is being placed on soil fertility studies in an effort to define the production problems on the University Farm. On the mineral soils on the valley floor a phosphorous fixation condition has been defined. Means by which the situation might be alleviated are under investigation. The addition of organic matter through transport of the organic soils provides a possible means of initiating high production to build up the organic matter of the soils through natural means. Time and placement and amounts of phosphorous fertilizer application are subject to investigation as the means of alleviating the condition. Minor element deficiencies have been noted and experiments completed indicating the nature of zinc deficiency. Dr. Ross has worked closely with certain members of the department in defining these production problems.

Some extension work has recently been performed in conjunction with the Plant Science Department in establishing a demonstration experiment at Taze Gul, a village 50 km. west of Erzurum. On the basis of this demonstration Ziraat Donatim in Erzurum has reported the sale of considerable amounts of fertilizer in this village. In addition department members contribute to the Extension Bulletin published monthly by the Extension Director, Doçent Dr. Ahmet Kurt.

Major Achievements

From examination of the qualifications of the staff members, courses being taught and research underway it would appear that the department has and will continue to make a fine contribution to the development of the University and have a decided effect on increasing the production potential of eastern Turkey. The realization of these potentials will depend upon the development of leadership and maintenance of freedom for research and availability of laboratory equipment.

Improvement in instruction has been taking place with translation of important texts in three fields of study.

Home Economics

From the records of Ataturk University, there is no formal beginning provided of Home Economics work. The records in 1959 indicate there were some Home Economics activities prior to that date.

There have been two staff members in Home Economics. Their respective fields of training are in Human Nutrition and Clothing. There have never been laboratories or equipment for the practical training of students.

Home Economics never achieved full departmental status. An Acting Chairman (Professor Ted Doane) was named on December 3, 1964. During his tenure Home Economics achieved its greatest stature to date. The two Home Economists both acquired their Doctor Assistant degrees, several courses in Home Economics were taught on campus and Extension programs were offered.

Following Professor Doane's departure, the administrative aspects of Home Economics reverted to the Dean of Agriculture and in mid-summer of 1967 these were transferred to the Department of Agricultural Economics. The two Home Economists taught several courses during the 1966-67 academic year, assisted with Extension work and conducted some research under the guidance of the Extension Advisor. They did not teach Home Economics courses during the 1967-68 school year after they were transferred to the Agricultural Economics Department.

In the fall of 1967 Dr. Aimee Moore, Consultant in Home Economics under the University of Nebraska--Hacettepe Medical Center--Rockefeller Foundation Program, visited Ataturk University by invitation for the purpose of surveying Home Economics work. The survey coupled with other evidence indicates the following as the present status of Home Economics at Ataturk University: (1) Home Economics work is being suppressed under its present administrative leadership, (2) the two Home Economists want to improve themselves academically in subject matter as well as earn their Doçent Dr. degrees, (3) the morale of these two staff members is very low, and (4) no person in a position of administrative leadership in the Agricultural Faculty is actively interested in assisting the Home Economics work to assume a contributing role for the social improvement of people in Eastern Turkey.

Unless major assistance is provided soon Home Economics work undoubtedly will be phased out in the Agricultural Faculty. This will be accomplished by the present Chairman of the Agricultural Economics Department who, through his discouraging attitude and actions, will, in effect, directly contribute to the resignation or transfer of the two staff members presently on duty.

The Dean of the Medical Faculty perceives the need for Home Economics work in Eastern Turkey particularly in the fields of human nutrition, child care and family planning. He is interested in establishing a program to train dieticians for Eastern Turkey within his Medical Faculty. Work in family planning is underway.

As resources are made available, the Dean of the Medical Faculty will want to complement his work by including an active program for the training of dieticians who, when trained, can be located in strategic locations throughout Eastern Turkey.

Home Economics work at the University and field levels, although needed and important to the well-being of the populations of Eastern Turkey, will continue to progress very slowly unless an understanding and acceptance of its potential worth is achieved by more leaders of Turkish educational institutions. More facilities and curricula for the development of professional persons as established at Hacettepe Medical Center are needed.

Present evidence strongly indicates the future of Home Economics in Turkey might rest with the few dynamic Medical Faculties rather than through the Agricultural Faculty system.

UNIVERSITY EXTENSION INSTITUTE

In 1943, the Grand National Assembly of the Turkish Republic passed the law which enabled the Ministry of Agriculture to establish an Agricultural Extension Service. By the mid-1950's the majority of provinces had accepted the program. Of the last ten provinces to approve the program, nine were in the geographic area which Ataturk University was established to serve. Eastern Turkey provinces were slow to accept Extension work under the Ministry of Agriculture.

Ataturk University was established to function under the auspices of the Ministry of Education. A major program envisioned for Ataturk University was an active-viable Extension organization--an off-campus coordinated process whereby information on farm and home technology could be disseminated and adoption encouraged among the people in 18 eastern provinces.

Major Progress and Problems

To be an effective educational arm of the University, the basis for establishing Extension work had to be jointly worked out between Ataturk University and Ministry of Education officials and Ministry of Agriculture Extension officials. The first suggested draft of the working agreement was written by University Agriculture Faculty personnel in 1960. The faculty in 1965 agreed on a revised proposal. In 1966, after careful analysis, the proposal was to form a University-wide Extension Institute which would include off-campus work for all faculties. In early 1967, after the University-wide concept was approved by the faculty, a protocol which provided for cooperation and coordination of both agriculture research and extension efforts between the Ministry of Agriculture and Ataturk University for eastern Turkey was officially accepted and signed. One provision of the protocol stipulated the Ministry of Agriculture would provide one staff member to serve on campus as liaison between the two agencies.

The first Extension Director on duty only a few months resigned in early May, 1966. The second man named relinquished the position in mid-1967. The third Director remains on duty. All directors had their Doctor degree upon assuming this role. Their respective Extension duties were in addition to other departmental responsibilities. Sufficient time to do justice to both roles was usually impossible.

Through AID/University of Nebraska assistance, the Extension Institute was developed through an interesting process of change worthy of noting. Before a U. S. Extension Advisor was on duty, advisors in other fields, particularly in Animal Science, Soil Science and Plant Science insisted on planning and conducting departmental extension educational activities. Upon Professor Doane's arrival in 1964 as

Extension Advisor, dynamic leadership was exerted to formalize the Extension Institute and to personally supervise the initiation and execution of many programs--activities and demonstrations. Professor Doane provided many sound examples of what coordinated extension work involved. Turkish personnel were assigned to positions of responsibility and to committees. A short but important period of time elapsed between the time Professor Doane departed in 1966 and Professor Loewenstein arrived as Extension Advisor. Under the latter's supporting guidance and counseling Turkish leadership emerged to assume most of the roles of obvious direction. The University Extension Institute committee membership was drastically reorganized and was active during 1967 and the first half of 1968. The Turkish Extension Director assumed the responsibilities for dissemination of information through newsletters and circulars and for the active coordination of the other extension programs sponsored through the Institute. As a result of active Turkish leadership, more information became available through the departments for dissemination. Greater program coordination also resulted between the Institute and other governmental agencies.

Although University Extension work, with emphasis on Agriculture, appears to be basically developed, its future role and stability rests precariously upon the leadership of too few influential staff members of the University. The Extension Institute, although supported by Ministries of Education and Agriculture through their respective approval and the development of a protocol, is not supported by a specific statement within the law under which the University operates. With the present trend of some faculty members to abide by the letter of the present law, the future of the Extension Institute remains uncertain.

Despite this apparent aura of doubt, Extension work to date has made much progress and has developed a good reputation. During the past six months programs have included the extensive use of ISIS films, one seminar of six sessions on Extension Education was conducted by the Extension Advisor for 25 Agricultural Faculty Assistants, the Animal Science Department presented a three-day seminar to village cattlemen, news bulletins and extension circulars were prepared and disseminated on a monthly basis, village demonstration work in crop production was planned and funded, a cheesemaking training course was inaugurated, numerous radio programs were prepared and presented, and additional visual aids equipment was obtained and used.

Major Achievements

The University faculty and administrators were enthusiastic supporters of Extension to the extent a Director of the University Extension Institute was named in early 1966 before formal approval for the Institute was obtained from the Ministry of Education.

In addition to the Director the Extension Institute is staffed with one full-time specialist. In early 1968 the former Agricultural Director of Erzurum Province accepted the liaison position and is on duty on campus.

The Agricultural Faculty Professors Council voted in late 1967 to name a staff member to become head of Agricultural Extension for academic purposes. Thereby, initial steps were made for the potential development of a teaching department of Agricultural Extension.

Key Turkish personnel were developed to assume the roles of leadership in Extension work. The relatively new specialist who works full time with Extension was tutored and given examinations in 1968 for the purpose of qualifying him to teach the Extension Methods course, seminars and other short courses devoted to Extension educational work. The specialist became skillful in operating, maintaining and demonstrating the uses of audio-visual equipment and in maintaining records for film and equipment uses. The University Extension Director, Rector and United States Extension Advisor devoted many conferences in 1967 and 1968 to planning and determining the process whereby Extension programming could assume greater dimensions within the University which ultimately would be of increased assistance to people in eastern Turkey.

Most Agricultural Faculty members express their interest in and seemingly understand and accept the need and importance of Extension work as a major means for improving the economic and social standards of villagers. As yet too few willingly devote much time and effort toward Extension programs. However, the small Extension Institute staff has been meeting with greater cooperation with departmental staff than ever before as is evidenced by the nature and accelerated rate of the many and varied Extension educational programs conducted and underway.

RESEARCH

This section on research at Ataturk University will be limited to agricultural research. Although some research has been done for the fulfillment of requirements in advanced degrees in the Science and Letters Faculty, they have only very recently taken steps to organize a Research Institute. The Medical Faculty is relatively new at Ataturk University, has no formal connection with the AID/Nebraska contract and is also in the formative stages of organizing research.

Although the Ataturk University Agricultural Research Institute was organized during the winter of 1961, some experiments were started as early as 1957 when part of the present University Farm was a State Seed Improvement Farm.

In the fall of 1960, the State Seed Improvement Farm at Erzurum was transferred to the University. At that time a copy of the records of all experiments that were of a continuous nature were turned over to the Plant Science Department. The farm, along with a large contiguous area gave the University several thousand acres close to the campus for use as a demonstration farm and experimental station.

As now organized the Research Institute is composed of a number of members selected by the Dean, approved by the Rector and headed by a Research Director. From shortly after its formation the Director has been Docent Doctor Fahrettin Tosun. The research of all departments in the Faculty of Agriculture is under the Research Director. Acceptance of projects and expenditure of funds is the responsibility of the Institute.

Major Progress and Problems

Most of the equipment belonging to the Seed Improvement Farm was transferred to other stations prior to the transfer of the land to the University. Consequently it was necessary to purchase new equipment immediately. The AID/Nebraska contract provided \$164,000 for direct purchase of equipment and in addition, over \$83,000 was spent for such purchases from the University budget in 1961, 1962, and 1963.

This initial equipment has been supplemented since by expenditures from the Institute budget and the Nebraska contract commodity purchases.

Each year, the Director submits a budget request to the University for the operation in the coming year. This is based on projects approved, personnel employed and new equipment desired. The approved budget generally varies from about 500,000 TL to 1,000,000 TL (\$55,000 to \$110,000).

The budget of the Research Institute is entirely separate from that of the University Farm. There is a rather loose arrangement of cooperation with the Farm, and crops as well as animal products produced as the result of experiments are sold by the Farm. On the other hand, animals and other basic commodities for experiments are often furnished by the Farm.

A report on expenditures is furnished the Dean's office by the Research Institute at the end of each month.

The Institute generally has between 40 to 50 permanent personnel. Many of these are kadro positions but some are hired on a daily wage basis. They are classified as research technicians, chauffeurs, tractor drivers, watchmen, etc. During the summer when many field projects are active, additional temporary labor is hired as necessary.

Since the establishment of the Agricultural Research Institute in 1961 and up to 1968, 113 projects, of varying duration, have been approved. Distribution of projects by department as well as the status of all projects is shown in the table below:

Departmental Distribution and Present Status of Agricultural Research Projects

Department	Number of Projects			
	: Underway :	Cancelled :	Completed :	Total
Animal Science	8	5	15	28
Field Crops	9	8	9	26
Soil Science	5	11	5	21
Horticulture	4	3	1	8
Plant Protection	-	1	2	3
Culture-Technic	2	2	3	7
Agr. Economics	3	2	7	12
Pathology	-	1	5	6
Home Economics	-	1	1	2
TOTAL	31	34	48	113

As shown in the table, 34 projects were cancelled, after starting, due to lack of personnel including those who went to foreign countries for further training. Forty-eight projects have been completed and 31 are presently underway.

Of the 48 completed projects, 19 were used for Doctor or Doçent theses. Seventeen of the completed projects were published as Research Bulletins and 10 have been printed in the Research Annual.

To disseminate information on research underway and results of completed research, use is made of publications, seminars and field days, held in cooperation with the Extension Institute. These, especially the field days, have proven to be quite popular with nearby farmers. It is an excellent way to show villagers what is being done and they gain a greater appreciation of the practical value of scientific research.

The Agricultural Research Institute produces three types of publications: Research Annuals, Research Bulletins and Technical Bulletins. Progress reports of all research projects recently completed or currently underway are collected and printed each year. To date, Annuals in mimeograph form have been published for the years 1962, 1963, 1964 and 1965. The 1966 Annual, now being written, will be printed by the Ataturk University Press. Research Annuals are widely distributed to many organizations in Turkey.

Completed research projects, not used as Doctor or Doçent theses are published as Research Bulletins. The publications are sent to the many agricultural research organizations in Turkey, Europe and North America. Most of these organizations reciprocate by sending published results of their research work. A "Reading Room" has been established by the Institute to maintain these publications in a readily accessible place for study by faculty members.

Information, other than personal research results, collected by faculty members is published in the form of Technical Bulletins. Nine of these have been released to date. Technical Bulletins are distributed to many organizations in Turkey, especially to the Provincial and County Agricultural Offices.

Major Achievements

From opportunities available through the contract, several staff members achieved the knowledge, attitudes and skills basic to conducting the type of agricultural research needed in Eastern Turkey.

The research conducted in this Institute has provided considerable information on which to base recommendations which when applied can contribute significantly toward the economic improvement of farming in Eastern Turkey.

The Institute provides a needed impetus and means for the departments within the Agricultural Faculty to conduct research.

Through the coordinating efforts of the Institute, 48 projects have been completed and 31 are underway. The results of 27 of the completed projects were formally published in research annuals or bulletins. Nine technical bulletins were produced based on research findings. Information derived from research efforts was used extensively in classroom teaching.

ATATURK UNIVERSITY FARM

The nucleus of the farm is the previous Ministry of Agriculture Seed Increase Farm which was taken over by the University in 1960 and added to the holdings purchased by the Republic of Turkey to form the University Farm. A total of 10,000 acres of land out of which the University campus area is subtracted constitutes one block at Erzurum while 3,000 acres in two separate blocks were situated at Elazig.

At Erzurum the land is situated on the southern side of the valley beginning near the mountain side and sloping towards the valley floor to the canal in the valley center. The soil particles vary in size from large-sized aggregates at the higher altitude on the south where the smaller particles have been sorted out and washed downward, to a sandy loam with a high clay content on the valley floor. In the valley center a large area of organic soils has been formed under bog conditions which have now been alleviated by the canal.

The necessary initial investment in machinery and buildings made during the first five years has prevented capital investments in the land itself from being given the proper attention. It appeared to the observer at that time that the traditional cultural methods were being used except with power equipment.

Recently there has been an interest shown in realizing the potential productivity from the land as demonstrated by experiments made in the Research Institute. A committee from the agriculture faculty has been formed comprising the important areas of farm management. Under the chairmanship of the Dean of Agriculture it has already affected changes in fertilizer practices reflected in higher yields.

Younger staff members who have graduated from Ataturk University have shown a willingness to learn and a desire to increase yields through improved cultural conditions. Professor Ross encouraged the flow of information concerning improved cultural patterns through his contacts with farm personnel, gathering of information and publishing of bulletins indicating improved methods and also organizing a trip to western Turkey to inspect the State Farms where improved dryland methods are presently being practiced.

It is expected that in the near future the productivity of the University farmland can be raised to more closely approach the potential possible. In 1967, 46 wells were drilled by DSI, the Bureau of Water Development, and in 1968 it is planned that electric pumps will be installed for each well. It is planned also to develop irrigated land around each well, where practical, and to install facilities for the water service of the university campus including both buildings and grounds. On the invitation of the Professors Council, in

response to an offer of the Food and Agriculture Division of AID communicated by Professor Ross, Mr. George Knierum came to the University to make contacts so that help in the levelling and preparation of the potentially irrigable land around each well might be made available through AID.

In addition, the dryland farming areas are being given attention so the yield from this portion of the farmland can be expected to continue to show yield increases. In May, 1968, Mr. Robert Gifford with his counterpart in the State Farm System where he has the position of advisor to the Director, visited the institution at the invitation of Professor Ross, and gave a seminar on dryland agriculture. He also consulted with the various people concerned with this program.

The initial stages of development of buildings has now been made with the establishment of 17 structures for farming purposes and 39 lodgings for workmen. A complete set of farming implements is at hand with the necessary repair facilities. A cross breeding program of the native red cattle with Brown Swiss is underway and a herd of approximately 200 cattle are maintained to supply superior breeding stock to the farmers of the area.

Likewise a program of cross breeding Merino with the native Karaman sheep has been set up to improve the wool quality of the native sheep. A flock of 2,220 sheep is maintained. In addition a herd of 16 pure blood Arabian horses and two local horses are kept. A flock of 1,561 chickens provide eggs for sale as well as making it possible to distribute chicks of superior genotype to villages in the area in the spring. Forty hives of bees provide honey for local sale.

In 1967 almost 1,000,000 kg. of wheat were harvested. A portion of this is distributed directly to the farmers for seed wheat. In 1967 American midwest wheats such as Warrior, Gage and Scout were obtained from America through the offices of the State Farm System and were planted for increase at the Elazig farm. Since these wheats have been shown to be extremely well adapted and to yield very well in the Research Institute tests, they will be distributed to farmers if their promised advantage is realized in the larger fields.

The Ataturk University Farm gives promise of being a very real asset to the area of eastern Turkey in making available new and better agricultural products to the farmers and also in providing a model of approved farming methods for the surrounding areas. In addition it can, in a very substantial fashion, contribute to the financial welfare of the institution in the future.

SCIENCE AND LETTERS FACULTY

Language, Linguistics, and Modern English

"One obstacle to successful staff development at Ataturk University is the problem of teaching English. Most of the staff will take advanced training where proficiency in English is required. This has been true for participants . . . Unless we have the courses taught in English, we cannot maintain graduate-level standards. Since more than half of the library holdings are in English and English has become the predominant language of the world for science and technology, staff members need English to use their resource materials and to stay abreast of the literature in their fields."¹

During the 1967-68 fiscal year, the English Department staff included a United States professor under the AID/University of Nebraska program. Professor James J. Broz, Jr., arrived on campus July 8, 1967 for the purpose of coordinating the development of a program for teaching and learning English as a modern foreign language, including the supervision of the introduction of a 30-position electronic language laboratory, recording studio, maintenance facility, and staff development in both the teaching and laboratory program areas.

Present Status of the Department

The English Department offers 20 hours per week to English majors and approximately 10 hours per week to students from other faculties. Six American Peace Corps Volunteers and two British Volunteers served as model speakers in both the 20-hour course and the 10-hour course. Five part-time Turkish staff assisted in teaching the 10-hour courses.

Major Progress and Problems

The English curriculum from 1958 to 1967 was controlled by regulations that hindered the teaching and learning of English as a modern foreign language. Last year, officials at Ataturk University and Ministry of Education officials in Ankara changed dated legislation related to the curriculum and to the teaching staff. This new legislation opened the way for the introduction of a modern program, staff development, and the language laboratory.

¹Excerpt from a letter by Dr. D. G. Hanway, Chief Advisor to Nebraska Group, June 1965-June 1967, to Dr. A. C. Breckenridge, Vice Chancellor, the University of Nebraska, March 6, 1966.

Last July the Dean of Sciences and Letters and the chairman of the Department of English agreed to the linguistic principles upon which the modern program was based, including concurrence in procedures and requirements for the installation of the laboratory. Refer to Supplement 1, page These principles enabled the department to introduce: (1) a unified, sequential text, (2) proficiency (placement) and progress testing, (3) the placement of students by ability grouping, and (4) the use of the language laboratory on a one-to-one ratio.

With the close cooperation of University officials and with the knowledgeable expertise of Mrs. Ersin Erel, Nebraska Group Interpreter, the language laboratory cleared Turkish customs in three days.

Three rooms were required for the language laboratory complex--the laboratory room itself, a maintenance room, and a recording studio. Complete plans and specifications for setting up these rooms were prepared and submitted in August of 1967. While initial setting up started in September, 1967, work stopped in November. In February, 1968, AID and Nebraska officials informed the University that unless the machinery was installed along suggested guidelines, the laboratory machinery could be removed. In March, 1968, work on setting up the laboratory room (painting, curtains, carpets, minor repairs to windows, and fly screening) resumed. A contract for the maintenance room (workbench, cabinets, shelving) and the recording studio (a room inside a room made sound-proof) was let to a local Erzurum contractor. This work was completed and finished well, except for carpeting. The machines were installed on linoleum.

On March 14, 1968 two courses were established for staff. One dealt with automated modern language teaching--theory to practice--and the other dealt with comparative linguistics. Though both courses started late in the day, at least a precedent was established with respect to in-service staff training in the English Department. Because assistants from the French and German Departments were likely to be using the laboratory, the pedagogical language course was presented to them as well as to Turkish assistants from the Department of English. Professor Broz attended weekly staff meetings held by the American Peace Corps. And at these meetings, American and British staff had the opportunity to ventilate problems and to reflect upon solutions arising in the new program, i.e., rate of coverage, teaching methods, testing, and supplementation of the text, etc.

Although protocols were established with the AID Training Office, the Turkish American Association, and USIS, all located in Ankara, for visitations and lectures on modern theories and methods of teaching English as a foreign language on behalf of Turkish staff on this campus, little came of them. However, Mr. Ali Kanlioglu, English Language Specialist within AID Training Office, Ankara, with

the keen support of Dr. Robert Shields, Director, Training Program, made several visits to this campus for the purpose of talking with assistants in the Department of English on modern ways of teaching and learning English as a foreign language. Mr. Kanlioglu also spent several hours with the Chairman of the Department of English. These private conversations were of value to the program because Ali Bey reinforced as well as explained not only the theoretical bases upon which the program was built but also explained how the program should be introduced, i.e., the teaching methods that should be used in achieving the objectives of the course. By his efforts, Ali Bey gave much needed support to the program in reviewing the program with the department chairman.

Repeated requests from graduate medical and science students for modern English language training had been denied because of manpower problems. Since the modern English courses were presently restricted to English majors, a way had to be found to meet the needs of students from other faculties who earnestly wanted to study English on their own. The English Department had 180 pre-recorded lessons that followed the first-year English texts. Mr. Dooley, American Peace Corps Volunteer in the library, was asked to find out whether copies of the master lesson tapes could be placed into the library for check out by graduate students. The director of the library agreed this could be done without difficulty. Arrangements were completed to have lesson tapes and texts put into the library along with two small tape recorders which may be used in the library.

The AID Training Office in Ankara helped to acquire the complete set of master lesson tapes which accompany the English 900 series.

The University has not employed local qualified Turkish teachers of English as a foreign language. Such teachers have been trained locally by Georgetown University and the Defense Language Institute in Ankara, Izmir, and Istanbul. The present Turkish staff was prepared for traditional literary research and teaching. They are not prepared nor are they allowed to develop skills in the teaching of English as a modern foreign language at present. Since the new program involves 20 hours per week of aural-oral English for the first two years, with literature, criticism, and thesis writing later on, a different sort of Turkish staff is required in the English Department.

A preventive maintenance program for the equipment is essential. A trained and competent technician is also required in order for a preventive maintenance program to be successful. In both cases, the University has withheld support. The manufacturer of the laboratory, the DuKane Corporation of St. Charles, Illinois, is willing to train a Turkish person for the job as language laboratory technician. Qualified Turkish technicians from language laboratories in Ankara and Izmir have evidenced keen interest in working for this University. However, the University has not employed them, nor has the University contacted

DuKane Corporation with respect to stateside training of a technician. Without a language laboratory technician, the best that can be said is that the equipment is operational on a day-to-day basis.

Students at this University may elect either English, French, or German as a foreign language. While many students elect English as a result of pressure from their faculties or simply because they want to study English rather than something else, it is true that English has pre-empted the foreign language field insofar as scholarship and international discourse are concerned. Modern English should be required of all entering students for the first two years.

The American Peace Corps and British volunteers are new to the program and to the country. They worked diligently in actually launching the modern English course this last year. However, after the Nebraska Group departure, staff will lose direct and daily contact with the English professor from the Nebraska Group. Even though a Peace Corps linguist is in residence in Ankara, Erzurum is isolated and communication between Erzurum and Ankara is irregular. A full-time linguist with a speciality in teaching and learning English as a modern foreign language should be in residence for purposes of resource liaison with the volunteers.

Major Achievements

A 30 position electronic language laboratory was installed and made operational. To support the laboratory work a maintenance facility and recording studio were constructed.

A staff development program for both teaching and laboratory work was completed. The curriculum for teaching and learning English as a modern foreign language was developed which was based on modern linguistic principles.

SUPPLEMENT

Modern Language Teaching

Pedagogical Assumptions

1. The primary objective of the modern language program at Ataturk University is to teach students how to speak and to understand spoken foreign languages.
2. Language is essentially an oral phenomenon, with writing and reading a secondary counterpart.
3. A foreign language is best learned from a native speaker or near-native speaker.
4. Model sentences and dialogues introduce phonological and syntactical patterns of speech through the use of drills, which serve to:
 - (a) Create a conditioned response, with little formal attention to conventional rules of grammar,
 - (b) Provide an opportunity to draw analogies,
 - (c) Provide correct, sequential models of the patterns of speech,
 - (d) Provide instant, correct responses,
 - (e) Insure immediate correction of incorrect responses,
 - (f) Provide the framework for the systematic imitation and memorization of the basic sounds and structures of English, and
 - (g) Allow learners to compare their production with a standard model.
5. The teaching materials introduce patterns of speech in a progressive, sequential manner, thus providing students with the opportunity to recognize, to imitate, and to memorize the basic phonological and syntactical patterns of speech and then to manipulate those structures automatically by introduction of new lexical items into previously learned patterns of speech.
6. The basic patterns of speech are learned within an environment where there is regular practice with model sentences, with overlearning to a degree which induces automatic behavior in the language.
7. Most of the phonology of the foreign language will be introduced within model sentences.

8. The patterns of speech introduced in class are reinforced and extended by practice in the language laboratory.
9. Language learning, whether native or foreign, generally begins with a recognition of the sounds of language followed by their production in a form consistent with the phonological and syntactical grammar of the language, i.e., first there is recognition, then production, then sound and word orders, then writing and reading.
10. The influences and pressures of culture (social, psychological, economic, ethnic, political, religious, military, and historical) upon language acquisition and development are of secondary importance in a program which intends to teach adult students how to understand and to speak a modern foreign language.
11. Because a written counterpart of a foreign language is largely based upon an oral form, and because language is an oral phenomenon in culture, advanced courses in an intensive English program serve:
 - (a) To relate the oral form to a written counterpart,
 - (b) To permit practice in the writing of a foreign language,
 - (c) To provide students with the opportunity to develop reading skills and to practice their reading skills in a foreign language, and
 - (d) To explain the culture of the foreign language community by the introduction of contemporary prose selections.

Economics and Business Department

At the very beginning of the University certain courses in economics were taught in the Science and Letters Faculty. For three years instructors came from the Istanbul University Economics Faculty to teach such courses as Principles of Economics, Money and Banking, Foreign Trade and Prices. During some years the courses were taught on a concentrated basis.

Major Progress and Problems

Professor Fenske assumed direction of the Economics Department from 1961 until Professor Palmer arrived in February, 1963. At no time was the above arrangement officially formulated, but during this period the Agricultural Economics Department and the Economics Department functioned as one.

Osman Arikan was the first participant in Economics leaving Turkey in January, 1959 and returning in August, 1961. He attained a Master's degree at Nebraska and upon his return, the Doctor's degree in 1964 and Docent's degree in 1967.

Talat Gullap was the second participant to leave for Nebraska going in January, 1961 and returning in July, 1963. He also gained a Master's degree at Nebraska, and attained his Doctorate in Turkey in 1965.

Professor Fenske recruited three assistants for the Economics and Business Department. They were Abdalbaki Pirimoglu in 1961, Aydin Turkbak and Demir Aslan in 1962.

Professor Dr. Edgar Z. Palmer arrived in February 1963 to assume charge of the Economics and Business Department. During his two and one-half years at Ataturk University he organized the Economics and Business Department. The first students as majors were accepted in the fall term of the 1964-65 school year. Although 20 were anticipated, the final enrollment totaled 49 students, several of whom were transfers from other universities.

The Department is presently headed by Docent Dr. Tufan Yuce, a lawyer. The present faculty members consist of three Docent Doctors, four Doctor Assistants, ten Assistants and two Lecturers. Four of this number are lawyers and three are sociologists which leaves eleven in economics. Eight members have been or still are AID/Nebraska participants.

Although the Economics and Business Department is numerically strong, the Department has been reluctant to teach students other than

its own majors. For this reason Agricultural Economics students have experienced in recent years certain difficulties in rounding out their own course requirements.

If the Agricultural Economics and Economics and Business Departments were to combine, several advantages would result: (1) a staff of about 30 men would be available for teaching and carrying out research and extension; (2) a duplication of courses and efforts could be avoided, for example, the present policy in which Prices course is taught in each department; (3) there would be a coordinated course program to correct conflicts in courses coming on the same day and hour; (4) they would be in an improved position to tackle the many economic and social problems confronting eastern Turkey farmers and other people.

The problem would be where to center such a department. Presently two faculties each contain a department and each faculty would be reluctant to give up its department. Possibly the best solution would be to organize a new faculty with various majors within the fields of Economics and Social Science.

Major Achievements

The Economics and Business Department was organized and developed with major assistance from two United States professors during the early years of the contract period.

Staff development was effective. Eight members have received or are receiving Stateside training under the participant training program. Four of the five returned participants earned M.S. degrees. All members who received participant training remained on duty; there were no resignations.

Chemistry Department

Two United States professors provided major assistance toward the growth and development of the Chemistry Department. Professor Bryant Harrell was on duty from early 1963 until mid-1965. Professor Amel Bresson began his duties in September, 1965 and worked until the termination of the project. Both were assigned to duty by Ataturk University administrators as the Department Chairman.

Chemistry work was placed in the Science and Letters Faculty, first as a division and in the spring of 1966 was accorded departmental status with rights to establish a Chemistry major.

Major Progress and Problems

Upon completion of the science building, ample space was available for classrooms and laboratories but the latter lacked equipment and supplies. Therefore, in the initial years several classes were taught but the students were not exposed to laboratory work. Procurement of the necessary supplies and equipment was initiated in late 1964 by Professor Harrell. The laboratories for general and analytical chemistry were sufficiently supplied by the fall of 1965 to permit student use. Heretofore, budget and personal limitations were the major handicaps in getting the laboratories into operation. The teaching of biochemistry began with the spring semester of 1966.

Chemistry proved to be a difficult course for the students. There were many failures. Students, due to regulations, could enroll in advanced courses before successfully completing the initial or basic course. In an attempt to reduce the number of failures, translated and reproduced copies of the information were provided to the students. Also, by the spring of 1966 a prerequisite system was established which became effective with the fall semester. Students could not enroll in an advanced course before passing the required lower level course.

The main chemistry courses offered were Chemistry I and II (General), Chemistry 101 (Biochemistry) and Chemistry 52 (Analytical). The students of the Agricultural Faculty were the recipients of these courses. Developing a major in Chemistry was impossible due to the lack of qualified, competent staff members.

Staff development was a slow and arduous process. Of the five members who studied abroad as participants, one is on duty in the department, one remains abroad, and three resigned. In addition, one member received her Ph.D. degree at Stuttgart, Germany and upon returning (1966) immediately planned to leave and did within a year (1967).

Several assistants joined the department only later to transfer to another institution or report for compulsory military service.

Competent assistance was provided by two different men who had been trained abroad and were performing their military duty in Erzurum. Captain Rifat Danisman served as a lecturer in the department for three years beginning in the fall of 1964. During his tenure he earned his Turkish doctorate degree. Lt. Nail Senozan who earned his Ph.D. in Physical Chemistry maintained a close working relationship with the Chemistry staff despite the fact he was never admitted to Faculty status.

Presently eight assistants comprise the staff of the Chemistry department. Several are nearing the completion of their research for doctorate degrees. In research, staff have limited themselves to individual projects which will serve toward their professional advancement.

No qualified senior staff member was available as of June, 1968, to replace the Department Chairman who returned to the United States.

Major Achievements

Chemistry courses were developed with laboratory experience for students of the Agricultural Faculty. Students were provided translated and reproduced materials which were of major assistance and made possible a higher-quality teaching program.

A prerequisite course system was established, something new and different for the University. The idea served as a model example for other departments.

Staff development, particularly in the last two years developed into an orderly process. As a result, tenure of the assistants stabilized and numbers increased. Therefore, research programs could be conducted whereby assistants could actively work toward their doctorate degrees.

Physics-Mathematics Department

Only during the 1967-68 fiscal year has the Department of Physics and Mathematics been staffed with a United States professor under the contract. Professor Vandervort arrived on campus July 8, 1967, to assume the chairmanship of the department. No senior Turkish staff member had ever worked full-time in the department. Upon Professor Vandervort's departure, no qualified Turkish staff member was available to assume departmental responsibilities.

Major Progress and Problems

The department is staffed with six in physics and five in mathematics. Two members in each subject have earned their Turkish Doctorate degree. One more person is expected to complete his requirements and obtain his doctorate in early summer of 1968. The only member of the combined department to study abroad as a participant earned his Master's degree and returned to duty in late 1966.

The physics segment of the department had always provided only one service course for the students in the Soils Department. The new student regulations effective with the 1968-69 teaching year require all Faculty of Agriculture students to take a full-year physics course.

The mathematics segment of the department is a service department for all students of the Faculty of Agriculture and the Economics and Business Department of the Science and Letters Faculty. Previous student regulations provided for three credits the first semester and two credits the second semester. The new regulations increase this requirement to four credits the first semester and three credits the second semester.

Beginning with the next academic year twenty hours of credit in graduate courses are to be required of all new assistants. This past year the department accepted four new assistants--two in physics and two in mathematics.

Professor Vandervort taught one course during the year to assistants in the department. Constant's Theoretical Physics, Volume I, was covered. Progress of the class members did not allow for the teaching of material included in Volume II. A second course, perhaps in advanced calculus, should have been required of the assistants. However, the time for staff development of assistants was limited. They were required to teach from five to ten hours a week in Erzurum elementary schools due to a critical shortage of teachers in these two fields. In addition, the assistants were committed to

one hour a day for English language training. This training was successfully presented by Mrs. Vandervort.

Departmental research consisted entirely of the individual research projects of the staff members preparing theses for more advanced degrees. Professor Vandervort was instrumental through his guiding counsel to assist members to select and follow through on research in meaningful areas. Many resources--books and reprints of journal articles--were provided through the contract for the research projects of four staff members.

The department has a reasonable amount of standard laboratory equipment. The staff requested more equipment for the proposed increase in credits and students, and an order was completed. The tendency of the staff was to order one set of equipment for a great number of different experiments. Professor Vandervort recommended the selection of not more than fifteen experiments per semester, then requested several sets of equipment for each experiment so that a given laboratory section could be divided into small groups each of which would have its own equipment for the same experiment.

Ataturk University should soon be able to begin the training of secondary school teachers for eastern Turkey to overcome a critical shortage. The best of the teachers should become University assistants. To fully initiate this process the present assistants should take disciplined, broad graduate courses for credit. They should then teach these courses to third and fourth-year physics and mathematics majors. These majors should previously have had a two-year general physics course covering mechanics, heat, sound, electricity and magnetism, optics, and atomic and nuclear physics.

It is thus unfortunate the formal cooperation between Ataturk University and the University of Nebraska is terminating. In the Physics-Mathematics Department a Nebraska Group member could teach the graduate courses that the assistants need and are required to have by the new regulations until senior Turkish staff members with broader backgrounds would become available through staff development efforts.

At present most staff members teach and conduct research in their own fields of specialization. Undoubtedly the most valuable single task a United States Professor from the model university could do would be to demonstrate that the ordinary staff member should expect to teach two to four courses simultaneously in a variety of fields of specialization at the most advanced levels that will likely be offered at Ataturk University in the foreseeable future.

Major Achievements

The impact of but one year of major assistance from the contract was experienced in the Department of Physics and Mathematics.

Course credit and scope of content were expanded to more nearly meet the needs of certain graduates. Proposed "major" curriculums in both Physics and Mathematics were developed by Professor Vandervort. Although approval did not come during his tenure, certainly his proposals will serve as models. Course work and English language training for assistants were introduced and taught during the academic year. Assistants accepted the need for and willingly participated in the training.

Two Doctor Assistants were named following the approval of their research work which received considerable guidance from Professor Vandervort. Four new assistants qualified and were accepted into the expanding department.

Natural Sciences Department

Three professors under the AID/University of Nebraska program provided over six years of technical assistance toward the development of a Botany program at Ataturk University. The tenure of these men spanned the period of early 1959 to the fall of 1965.

The original intent was to develop a fully-functioning Botany Department. However, due to prevailing circumstances Botany and Zoology were combined to form the Biological Sciences Department.

In June, 1968, the Botany program was headed by a Docent Doctor who had received Stateside training as a participant. However, he resigned earlier and will transfer to a western Turkey university before the fall semester begins. Of the three assistants assigned to Botany work, one is presently Stateside as a participant.

The Zoology section is headed by a Professor Doctor who is presently on leave to Germany until the fall of 1968 for refresher work in research. Earlier during the contract period he spent one year on the participant program. Of the two Zoology assistants, one is presently Stateside as a participant. One Doctor Assistant is also on the Zoology staff.

Courses basic to the science requirements of Agriculture Faculty students have been taught. These were originally developed by United States professors. Laboratories to complement classroom course work in Botany and Zoology were provided some equipment and supplies under the contract commodity program.

With assistance through the AID/University of Nebraska project the two divisions, Botany and Zoology, became operational and functioned to provide the needed undergraduate course requirements of Agricultural students. In this supporting role, like the process followed by other departments, both divisions can expand and develop in future years to the point where two departments could exist and major curriculums be offered in addition to serving present needs.

MEDICAL FACULTY

The AID/University of Nebraska Contract with Ataturk University did not include any type of formal assistance or working relationship with the Medical Faculty. However, some liaison work was done by the Nebraska Group Chief of Party for the Mission with Medical Faculty administrators and many informal personal relationships were developed and maintained between personnel of the Nebraska Group and the Medical Faculty. Also, the Medical Faculty, which operates as an extension of the Hacettepe Medical Center of Ankara, has served as an example of the most advanced type of higher education in Turkey. Therefore, it seems appropriate to do more than acknowledge the existence of this Faculty on the Ataturk University campus.

Major Progress and Problems

The Medical Faculty became a reality in February, 1965. Their work includes teaching, research and the operation of one local hospital and several field medical centers. The faculty has increased to 120 professional staff members. The majority have received training abroad, usually in the United States.

1. Teaching

The medical students at Ataturk University first receive two years of pre-medical training at Hacettepe, and then take five years of medical training in Erzurum. The last year is an internship year.

The most advanced and modern training program is offered to the medical students. They are required to attend all classes, conferences and seminars, and also to prepare a thesis. They carry out research either independently or in conjunction with a staff member. The advanced students assist the faculty members with lesson preparation, and laboratory work. During the first two years the students are on night duty in the hospital every other night. After that, night duty falls every third night.

Student enrollments are presently limited to 50 entering each year. Presently there are about 140 students in three classes. The first students were enrolled in 1964 and the first class will graduate at the end of 1970.

Classrooms and laboratories are becoming adequately equipped. The students follow a more rigorous curriculum than do the students of the other two faculties who by declaration and deeds appear more interested in lowering academic standards than they are in learning.

The University-wide audio-visual center will be located in one of the new campus medical buildings. Qualified personnel to operate the center have already been employed.

2. Hospital Operations

Faculty members operate Numune Hospital in Erzurum. Its capacity is presently being doubled. Another hospital is under construction which is located near the University campus. In addition a ten-story hospital building is scheduled to be built on campus adjacent to the new administration, classroom and laboratory buildings. If the Medical Faculty becomes responsible for the operation of these facilities, it will include 1850 patient beds, a huge out-patient load and training programs for mid-wives and nurses. Within three years Erzurum will have one of the most modern medical centers in Turkey and will serve from five to six million population of Eastern Anatolia.

3. Field Activities

The Medical Faculty is strongly orientated towards community service. It has developed a close working relationship with the Nationalized Health Centers in Erzurum Province. Several field medical centers are directed by the Medical Faculty. Many referrals are made from these small centers to the Erzurum Hospital. Staff members of these small centers disseminate information on subjects other than medicine such as in the field of agriculture and home economics. Some of the most effective extension work at the grass-roots level is conducted through these small medical centers.

The programs of the Medical Faculty, under the capable leadership and insight of Dean Ali Ertugrul, were provided additional impetus in the form of a two million dollar loan in late 1967 through AID. The major part of the loan has been committed toward the purchase of medical equipment which is needed and necessary for laboratory and clinical use.

As has been evident by planning and actions, this faculty represents the most, or one of the most, advanced agencies in Eastern Turkey whose purposes have been dedicated toward the social improvement of the population. The other University faculties and other agencies who are supposed to be in existence for the benefit of the population could take heed of the many excellent examples and deeds performed by members of the Medical Faculty.

UNIVERSITY LIBRARY

Two AID/Nebraska University personnel from the United States assisted in the early development of the University Library. Their combined tenure amounted to about 31 months of technical library service to Ataturk University. Since the departure of the last contract librarian in mid-1964, Professor Leo Fenske, as a member of the Library Committee, provided United States oriented guidance for improvement.

In February, 1967, the University Library moved to new, spacious facilities which were designed to accommodate a modern functioning library service. Sufficient space was incorporated into the new building to allow for gradual expansion to meet the anticipated library needs of future years.

Financial support directly from AID as well as through the AID/University of Nebraska commodity program was provided for the purchase of many library books. The USIS book program also provided many volumes.

Major Progress and Problems

Development of a competent library staff was arduous. Although plans included sending at least one staff member Stateside for library science training, no person who could qualify was even available. No Turkish personnel had received formal training in library work. The present head librarian had received some experience in the field in another governmental agency before assuming her duties at the library. Staff positions are accorded little prestige and salaries are extremely low.

The cataloging of incoming books and periodicals was slow until major assistance was provided by Peace Corp Volunteers during 1966-1968. The Peace Corp Volunteer on duty at the close of the contract had attained his Master's degree in library science.

At the close of 1962 the library possessed 43 periodicals and 1,200 books. By June of 1968 these numbers had increased to 6,500 and 24,806, respectively. The majority of the books and periodicals are written in English. Over 400 professional periodicals are subscribed to.

Records maintained for the calendar year of 1967 indicate library facilities were used 20,042 times by students and 509 times by staff members.

Major Achievements

From the early efforts of AID/University of Nebraska Professors Collings and Vennix with later support from Professor Fenske and Peace Corp Volunteers in association with Turkish efforts, progress related to a central library system for Ataturk University proceeded in several areas.

A new library building was constructed.

Procedures and technical guidelines essential for the day-to-day operation of the library were established.

A Manual of Technical Service Procedures for use by the Director of Library and his staff was published.

Inter-library relationships were established with the United States Department of Agriculture, the United States Book Exchange, and the Science Library of London.

In-service staff training and development were sustained to library personnel in such operations as: cataloging, purchasing, filing, accessioning, and general library routine.

Liaison with Nebraska Technicians and Turkish counterparts was maintained with respect to purchase of specific textual material and technical equipment required for class, field, and laboratory work.

Liaison with the Faculty Library Committee was maintained on matters dealing with staff recruitment, training and development, including sustained efforts in bringing to the attention of University officials that a competent, qualified staff is essential in order for the library to serve the academic community.

Books and periodicals were provided through AID, the USIS Book Program, and the University of Nebraska.

Concept, purpose, and function of an audio-visual center was introduced. As of this writing guidelines for establishing an audio-visual center are being developed by the Director of the Library and the Rector's Office.

SUMMARY OF PROGRAM ACHIEVEMENTS

The major objective of the USAID/University of Nebraska program was to assist the Government of Turkey in developing the facilities, administration, staff, and programs--college level, graduate, research and extension--of Ataturk University in order to support the economic, social and cultural development of eastern Turkey.

Ataturk University is a reality today because of the efforts of the Government of Turkey and assistance from the United States Government through the Agency for International Development. The University is a functioning institution with some emphasis on service-type programs in agriculture (and medicine).

The campus and adjoining farm have over 50 structures completed or scheduled for completion in 1968 which include 10 classrooms, a laboratory, office buildings, 3 student dormitories, 18 staff apartment houses, 1 rug factory complex, several facilities for families of farm workers, numerous barns for livestock and other buildings for poultry, machinery and storage. The physical facilities were funded and built by the Government of Turkey.

Much equipment and reference material for laboratory use, experimental and research purposes, and classroom and extension teaching were provided through the USAID/University of Nebraska program and other related agencies. With but few exceptions, adequate use has been made and continues to be made of these items. The nature and quality of research, extension and classroom teaching, were extensively broadened and improved through the commodity program.

Two faculties, the Agriculture Faculty and Science and Letters Faculty, were assisted in development under the auspices of the contract. In addition, the Institutes of Agriculture, Research and University Extension (with emphasis on Agriculture) were initiated and nurtured through United States professional guidance to become on-going programs under Turkish leadership.

Seventy-three Ataturk University staff members were sent to the United States for advanced training under the participant program. The administrators, Dean and Department Chairmen of the Faculty of Agriculture, and the Dean of Science and Letters Faculty were former participants. Faculty numbers increased to 97 of whom 17 are senior staff in Agriculture and 111 of whom 9 are senior staff in Science and Letters. The majority of faculty recruits in recent years were from the University's own graduated students. The Turkish faculty now practices an improved system over earlier years of staff selection and development. Also, working relationships were formalized and are in operation between University and Ministry officials for research and extension programs which are considered basic to the economic and social development of eastern Turkey.

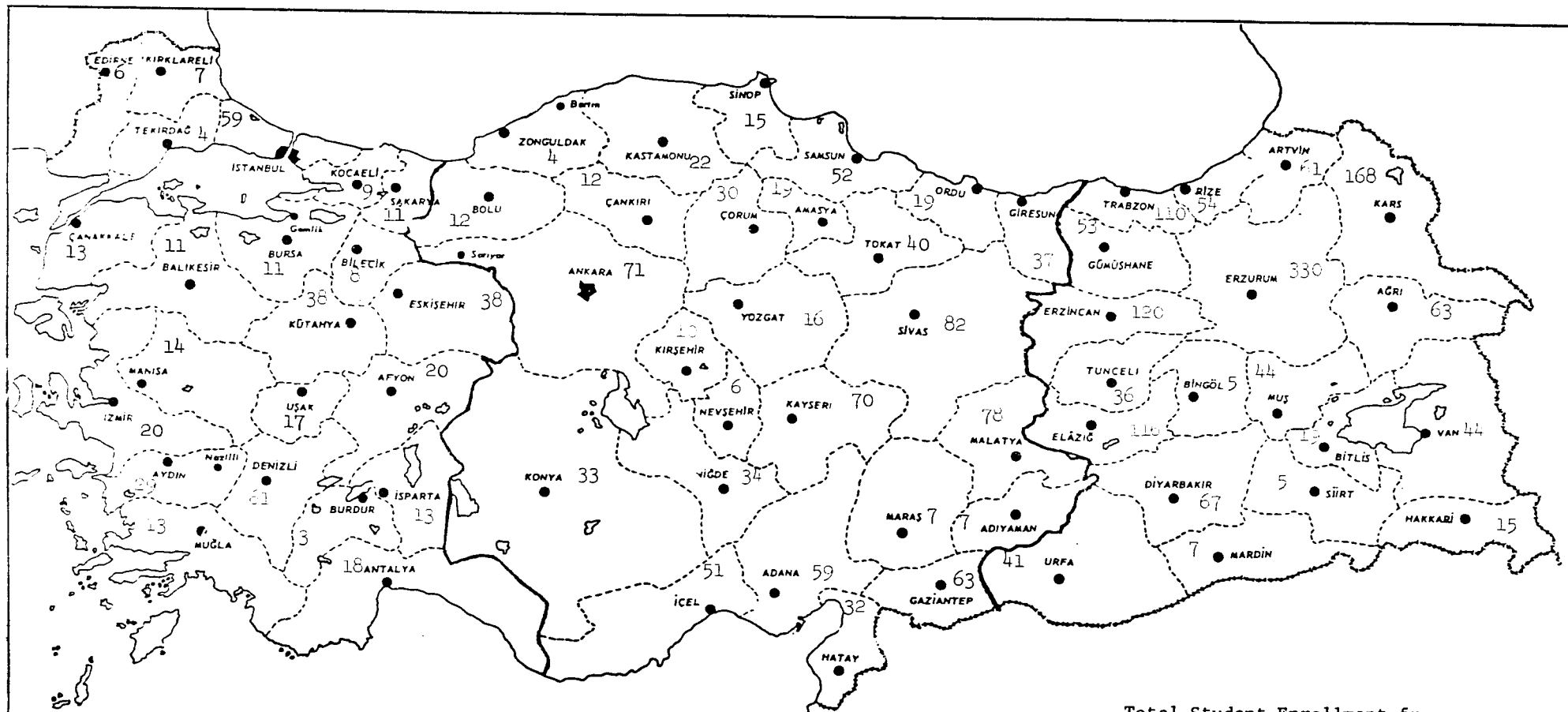
Student enrollment in the fall of 1968 is expected to reach nearly 2,000. The undergraduate curricula and student regulation requirements of both Faculties have increasingly demanded the fulfillment of higher standards. The result is a more highly qualified graduate. Several appropriate textbooks and other information written in English were translated into Turkish and provided for student use. A modern language laboratory was installed and will be used to extend classroom work in teaching English as a foreign language.

From opportunities available through the contract, several Turkish staff members achieved the knowledge, attitudes and skills basic to conducting the type of agricultural research needed in eastern Turkey. The 48 research projects completed provided considerable information on which to base recommendations for improved livestock, soils, crops and pasture practices through Extension programs and classroom teaching. Thirty-one more research projects were underway in mid-1968.

University Extension work in Agriculture under Turkish leadership achieved the basic level of growth and development whereby they were functioning as a service-arm to the University. Most Agricultural Faculty members express their interest in and seemingly understand and accept the need and importance of Extension work as a major means for improving the economic and social standards of villagers.

The influence of the University is becoming widespread and accepted in eastern Turkey. Off-campus programs in horticulture, crops and livestock production and on-campus field days, seminars and other meetings have provided opportunities for many villagers and townspeople to experience contacts and receive assistance from the University. Therefore, field clientele have been developed who are making their needs known and are insisting on help from faculty members and University programs. This fact is expected to provide much impetus to University staff members as they continue future agricultural research and extension programs.

A P P E N D I X



ENTERING FRESHMAN ENROLLMENT
AGRICULTURE FACULTY

	<u>1958-59</u>		<u>1959-60</u>		<u>1960-1</u>		<u>1961-2</u>		<u>1962-3</u>			
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
Soils			25	6	23	4	40	3	29	4		
Animal Science	34	2	7	-	11	1	15	-	32	1		
Plant Science							39	3	35	2		
Agric. Economics	78	1	23	2					21	4		
General Agriculture	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>37</u>	<u>8</u>	<u>33</u>	<u>2</u>	<u>38</u>	<u>2</u>		
	112	3	55	8	71	13	127	8	155	13		
	<u>1963-4</u>		<u>1964-5</u>		<u>1965-6</u>		<u>1966-7</u>		<u>1967-8</u>		<u>Total</u>	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Soils	60	3	44	3	35	-	35	-	37	3	328	26
Animal Science	47	-	36	1	40	-	41	-	45	-	308	5
Plant Science	44	3	27	1	32	3	36	3	42	2	255	17
Agric. Economics	52	3	30	2	32	3	37	3	37	4	343	24
General Agriculture	<u>45</u>	<u>4</u>	<u>27</u>	<u>—</u>	<u>33</u>	<u>1</u>	<u>33</u>	<u>1</u>	<u>33</u>	<u>1</u>	<u>246</u>	<u>17</u>
	248	13	164	7	172	7	182	7	194	10	1480	89

FRESHMAN ENROLLMENT 1958-68
LETTERS AND SCIENCE FACULTY

	<u>1958-59</u>		<u>1959-60</u>		<u>1960-1</u>		<u>1961-2</u>		<u>1962-3</u>			
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
English	3	2	-	6	1	3	4	-	1	-		
French	2	2			4	1	4	-	4	-		
German		1	1	1			2	-	-	1		
Turkish			3	2	3	-	9	2	33	2		
Economics & Business	—	—	—	—	—	—	—	—	—	—		
	5	5	4	9	8	4	19	2	38	3		
	<u>1963-4</u>		<u>1964-5</u>		<u>1965-6</u>		<u>1966-7</u>		<u>1967-8</u>		<u>Total</u>	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
English	18	6	16	11	27	6	35	8	46	8	151	50
French	19	-	19	6	53	6	31	3	45	6	181	24
German	19	3	6	4	20	1	29	3	33	2	110	16
Turkish	55	4	60	6	53	9	57	6	53	8	326	39
Economics & Business	—	—	<u>37</u>	<u>9</u>	<u>63</u>	<u>7</u>	<u>84</u>	<u>9</u>	<u>72</u>	<u>4</u>	<u>256</u>	<u>29</u>
	111	13	138	36	216	29	236	29	249	28	1024	158

TOTAL STUDENT ENROLLMENT

<u>School Year</u>	<u>Arts and Science</u>	<u>Agriculture</u>	<u>Total</u>
1958-59	10	115	125
1959-60	23	178	201
1960-61	35	262	297
1961-62	56	397	453
1962-63	87	438	525
1963-64	198	589	797
1964-65	252	739	991
1965-66	537	782	1,319
1966-67	796	791	1,590
1967-68	966	758	1,724

GRADUATES
AGRICULTURAL FACULTY

	<u>1961-2</u>		<u>1962-3</u>		<u>1963-4</u>		<u>1964-5</u>		<u>1965-6</u>		<u>1966-7</u>		<u>Total</u>	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Soils			24	6	19	4	34	1	31	4	53	3	161	18
Animal Science	32	2	8	-	6	-	11	1	34	1	36	-	127	4
Plant Science							23	1	38	1	33	3	94	5
Agric. Economics	75	1	20	2	4	-	23	3	23	2	41	3	186	11
General Agric.	—	—	—	—	25	8	5	—	32	2	35	6	97	16
Total	107	3	52	8	54	12	96	6	158	10	198	15	665	54

GRADUATES
LETTERS AND SCIENCE FACULTY

	<u>1961-2</u>		<u>1962-3</u>		<u>1963-4</u>		<u>1964-5</u>		<u>1965-6</u>		<u>1966-7</u>		<u>Total</u>	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
English	2	2	1	6	-	2	4	-	2	1	4	3	13	14
French	2	2			1	1	1	-	-	1	16	-	20	4
German			-	1					2	1	13	3	15	5
Turkish	—	—	3	2	3	—	9	2	22	1	33	3	70	8
Total	4	4	4	9	4	3	14	2	26	4	66	9	118	31

Participants Trained in United States
June 30, 1968

Name	Specialty	Starting Date	Univ.	Duration	U.S. Degree	Position at time of Training	Present Position
<u>Agricultural Faculty</u>							
<u>Agricultural Economics</u>							
*Aksoz, Ibrahim	Farm Mgt.	Jan. '57		2 yrs. 6 mos.		Dr. Asst.	Prof. Dr. Chm.
Aras, Ali	Farm Mgt.	Oct. '57		1 yr.		Docent	Resigned
Caglar, Metin	Prod. Econ.	July '67	Nebr.	1 yr.		Asst.	In U.S.
Gorgunary, Neriman	Home Econ.	Jan. '59	Nebr.	1 yr. 10 mos.		Asst.	Dr. Asst.
Gulten, Sefkati	Extension	Aug. '65	Nebr.	2 yrs.			Dr. Asst. (army)
Hatanoglu, Turgut	Econ. Theory	Feb. '62	Mont.	2 yrs. 6 mos.	M.S.	Asst.	Dr. Asst.
*Isyar, Yuksel	Statistics	Aug. '65	Nebr.	2 yrs.		Asst.	In U.S.
*Kip, Ergun	Farm Mgt.	Sept. '63	Minn., Cal.	2 yrs.		Asst.	In U.S.
Ogut, Cevdet	Ag. Econ.	July '67	Nebr.	1 yr.		Asst.	In U.S.
Turkodan, Orhan	Rural Soc.	Aug. '62		2 yrs.		Dr. Asst.	
Zoral, Kutlu	Marketing	Mar. '62	Mont.	2 yrs. 6 mos.	M.S.	Asst.	Dr. Asst.
<u>Agricultural Engineering</u>							
Alici, Unal		July '67	Nebr.	1 yr.		Asst.	In U.S.
Alkan, Ziya	Farm Struct.	Jan. '57	Nebr.	4 yrs.	B.S.	Asst.	Doc. Dr. Chm.
Ersayan, Altan	Farm Mach.	Jan. '59		2 yrs.		Asst.	Resigned
Ertugrul, Hursit	Irrigation	Jan. '59	Nebr.	2 yrs.		Asst.	Doc. Dr.
Kushan, Battal	Power Mach.	Aug. '65	Nebr.	2 yrs. 11 mos.		Dr. Asst.	In U.S.
Ozdengiz, Ali	Irrigation	Sept. '63	Calif.	2 yrs.	B.S.	Dr. Asst.	Dr. Asst.
Sisman, Nevzat	Farm Struct.	Jan. '65		1 yr.		Dr. Asst.	Dr. Asst.

Name	Specialty	Starting Date	Univ.	Duration	U.S. Degree	Position at time of Training	Present Position
<u>Agricultural Faculty (Cont'd)</u>							
<u>Animal Science</u>							
*Aksoy, Ayhan	Nutrition	Jan. '64	Nebr.	2 yrs.		Asst.	In U.S.
Biyikoglu, Kemal	Cattle Breed.	Jan. '59	Nebr.	2 yrs.		Dr. Asst.	Prof. Dr. Chm.
Goksu, Turgut	Nutrition	June '58		2 yrs.		Dr. Asst.	Resigned
Hasimoglu, Sumer	Production	July '67	Nebr.	1 yr.		Asst.	In U.S.
Ipek, Haluk	Poultry	Jan. '59	Ore. St.	2 yrs.	M.S.	Asst.	Doc. Dr.
Karatas, Saban	Biometry & Animal Sci.	Jan. '59	Cornell	2 yrs.		Dr. Asst.	Prof. Dr., Dean, Letters & Sci.
Leloglu, Selahattin	Vet. Ext.	Jan. '66	Nebr.	2 yrs.	M.S.	Asst.	Asst.
Ozhan, Macit	An. Prod.	May '57	Nebr.	2 yrs. 2 mos.	M.S.	Asst.	Doc. Dr.
Ucarci, Ferit	An. Prod.	Sept. '57	Nebr.	2 yrs.	M.S.	Asst.	Doc. Dr.
<u>Dairy Technology</u>							
Dogan, Kamuran	Dairy Tech.	Jan. '61		1 yr. 7 mos.		Asst.	Resigned
*Firatin, Nezihe	Dairy Tech.	Jan. '61		1 yr. 7 mos.		Asst.	Resigned
Kurt, Ahmet	Dairy Tech.	May '57	Wis.	2 yr. 1 mo.	M.S.	Asst.	Doc. Dr. Chm.
<u>Plant Science</u>							
Apan, Huseyin	Horticulture	July '67	Nebr.	1 yr.		Dr. Asst.	In U.S.
Baydar, Saffet	Plant Path.	Jan. '66	Nebr.	1 yr. 5 mos.		Asst.	In U.S.
*Baysal, Ismet	Forage Crops	Sept. '63	Nebr. & Canada	2 yrs.		Asst.	Asst.
Gunel, Erol	Indust. Crops	Sept. '66	Nebr.	1 yr. 10 mos.		Asst.	In U.S.
Istar, Ali	Horticulture	Jan. '59		2 yrs.		Dr. Asst.	Doc. Dr.

Name	Specialty	Starting Date	Univ.	Duration	U.S. Degree	Position at time of Training	Present Position
<u>Agricultural Faculty (Cont'd)</u>							
<u>Plant Science (Cont'd)</u>							
Karaca, Ibrahim	Plant Path.	Sept. '61		6 mos.		Docent	Resigned
Koycu, Coskun	Cereal Crops	Jan. '66	Nebr.	2 yrs. 5 mos.		Asst.	In U.S.
Ozbek, Hikmet	Entomology	July '67	Nebr.	1 yr.		Asst.	In U.S.
Senol, Sabahattin	Plant Breed.	Sept. '63	Nebr.	2 yrs.		Dr. Asst.	Doc. Dr.
Tanriverdi, Fuat	Horticulture	Nov. '66	Nebr.	1 yr. 8 mos.		Dr. Asst.	In U.S.
*Tosun, Fahrettin	Pasture & Forage Crops	Jan. '57	Nebr.	3 yrs. 4 mos.	Ph.D.	Asst.	Res. Inst.
Yuksel, Hasan	Entomology	Jan. '59		1 yr. 6 mos.		Dr. Asst.	Prof. Dr.
<u>Soil Science</u>							
*Aksoy, Necati	Soil Micro- biology	Jan. '61	Nebr.	2 yrs. 7 mos.	Ph.D.	Asst.	Dr. Asst.
*Baykan, Omer	Soil Analysis	Jan. '57					
		Sept. '61		3 yrs.		Asst.	Resigned
Berkman, Inayet	Soil Physics	Jan. '59	Nebr.	1 yr. 8 mos.		Asst.	Lect.
Celebi, Hayati	Soil Conserv.	July '64	Nebr.	2 yrs.		Dr. Asst.	Dr. Asst.
Ergene, Abdussolam	Soil Chem.	Sept. '57		1 yr. 10 mos.		Dr. Asst.	Prof. Dr. Chm.
Ogus, Lutfi	Soil Fert.	Jan. '59	Nebr.	2 yrs. 7 mos.	M.S.	Asst.	Doc. Dr.
Oruc, Nazmi	Soil Chem.	Jan. '64	Ariz.	2 yrs.	M.S.	Dr. Asst.	Dr. Asst.
<u>Vet. Bacteriology</u>							
Leloglu, Necdet	Vet. Bact.	Jan. '64	Nebr.	2 yrs. 8 mos.	M.S.	Asst.	Dr. Asst.

Name	Specialty	Starting Date	Univ.	Duration	U.S. Degree	Position at time of Training	Present Position
<u>Letters & Science Faculty</u>							
<u>Botany</u>							
Dalci, Muhammet	Botany	July '67	Nebr.	1 yr.		Asst.	In U.S.
Oner, Mehmet	Botany	Feb. '59	Nebr.	2 yrs. 8 mos.		Asst.	Doc. Dr.
<u>Chemistry</u>							
*Beygu, Sara	Biochemistry	Jan. '64	Wis. & Nebr.	2 yrs. 5 mos.		Asst.	Asst.
Cataltas, Ihsan	Gen. Chem.	Jan. '57		4 yrs. 6 mos.		Dr. Asst.	Resigned
*Pekin, Burhan	Phys. Chem.	Oct. '57		1 yr. 7 mos.		Dr. Asst.	Resigned
*Sozmen, Mehmet	Org. Chem.	Aug. '57		1 yr. 6 mos.		Asst.	Resigned
*Yildiz, Attila	Anal. Chem.	Sept. '63	N. Car. St.	2 yrs.		Asst.	In U.S.
<u>Economics</u>							
Arikan, Osman	Gen. Econ.	Jan. '59	Nebr.	2 yrs. 7 mos.	M.S.	Asst.	Doc. Dr.
Gullap, Talat	Bus. Econ.	Jan. '61	Nebr.	2 yrs. 5 mos.	M.S.	Asst.	Dr. Asst.
Pirimoglu, Abdulbaki	Economics	Feb. '67	Nebr.	1 yr. 4 mos.		Asst.	In U.S.
Toraman, Ayhan	Economics	July '67	Nebr.	1 yr.		Asst.	In U.S.
Turko, Metin	Economics	July '67	Nebr.	1 yr.		Asst.	In U.S.
Akmut, Ozdemir	Economics	Aug. '65	Nebr.	2 yrs.	M.S.	Asst.	Asst.
Aslan, Demir	Economics	Aug. '65	Nebr.	2 yrs. 6 mos.	M.S.	Asst.	Dr. Asst.
<u>English</u>							
Ergin, Seckin	English	Aug. '65	Nebr.	2 yrs.		Asst.	Asst.
Gunel, Gunes	English	Sept. '66	Nebr.	1 yr. 10 mos.		Asst.	In U.S.
Ozgudek, Fatma	English	Sept. '66	Clemson & Georgetown	1 yr. 10 mos.		Asst.	In U.S.